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EDITED BY
BERNARD BLOCH
Yale University

ALBERT C. BAUGH
University of Pennsylvania

M. B. EMENEAU
University of California

ROBERT A. HALL JR.
Brown University

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GRAMMATICAL CATEGORIES*

†BENJAMIN LEE WHORF

[The paper outlines a general theory of grammatical categories. These fall into two main types, descriptive and taxonomic. Descriptive categories are either specific or generic. There are three kinds of specific categories: overt (phenotype), covert (cryptotype), and isosemantic; each of these is subdivided into selective categories and modulus categories. All terms in this classification are defined and illustrated.]

The very natural tendency to use terms derived from traditional grammar, like verb, noun, adjective, passive voice, in describing languages outside of Indo-European, is fraught with grave possibilities of misunderstanding. At the same time it is desirable to define these terms in such a way that we can avail ourselves of their great convenience and where possible apply them to exotic languages in a scientific and consistent way. To do this, we must re-examine the types of grammatical category that are found in languages, using a world-wide view of linguistic phenomena, frame concepts more or less new, and make needed additions to terminology. These observations apply *pari passu* to English, which hardly less than some American Indian languages is off the pattern of general Indo-European.¹

In the reaction from conventional grammars of American languages based on classical models, there has been a tendency to restrict attention to the morphemes by which many grammatical forms are marked. This view loses sight of various word-classes that are marked not by morphemic tags but by types of patterning, e.g. by the systematic avoidance of certain morphemes, by lexical selection, by word-order that is also CLASS-ORDER; in general by association with definite linguistic configurations. At the beginning of investigation of a language, the 'functional' type of definition, e.g. that a word of a certain class, say a 'noun', is 'a word which does so-and-so', is to be avoided when this is the ONLY test of distinction applied; for people's conceptions of what a given word 'does' in an unfamiliar language may be as diverse as their own native languages, linguistic educations, and philosophical predilections. The categories studied in grammar are those recognizable through facts of a configurational sort, and these facts are the same for all observers. Yet I do not share the complete distrust of all functional definitions which a few modern grammarians seem to show. After categories have been outlined according to configurative facts, it may be desirable to employ functional or operational symbolism as the investigation proceeds. Linked with configurative data, operational descriptions becomes valid as possible ways of stating the MEANING of the forms, 'meaning' in such cases being

* [This paper was written late in 1937 at the request of Franz Boas, then editor of the *International Journal of American Linguistics*. The manuscript was found in the Boas collection by C. F. Voegelin and Z. S. Harris. The author died on July 26, 1941. BB]

¹ The author wishes to acknowledge his indebtedness to his colleagues, Dr. George L. Trager and Dr. Morris Swadesh, with whom some of these questions of category have been discussed.

a characterization which succinctly accounts for all the semantic and configurational facts, known or predictable.

We may first distinguish between OVERT CATEGORIES and COVERT CATEGORIES.

An overt category is a category having a formal mark which is present (with only infrequent exceptions) in every sentence containing a member of the category. The mark need not be part of the same word to which the category may be said to be attached in a paradigmatic sense, i.e. it need not be a suffix, prefix, vowel-change, or other 'inflection', but may be a detached word or a certain patterning of the whole sentence. Thus in English the plural of nouns is an overt category, marked usually in the paradigm word (the noun in question) by the suffix *-s* or a vowel-change, but in the case of words like *fish*, *sheep*, and certain gentile plurals, marked by the form of the verb, the manner of use of the articles, etc. In *fish appeared* the absence of any article denotes plural, in *the fish will be plentiful* a pluralizing adjective denotes it, in *the Chinese arrived* and *the Kwakiutl arrived*, the definite article coupled with lack of a singular marker like *person*, *Chinaman*, or *Indian* denotes plural. In all these cases plural is overtly marked, and so with few exceptions are all noun plurals in English, so that noun-plural is an overt category in English.² In Southern Paiute the subject-person of a verb is marked by a sub-lexical element (or 'bound morpheme') that cannot stand alone, like Eng. *-s*; but it need not be attached to the verb, it may be attached to the first important word of the sentence. In English what may be called the potential mode of the verb is an overt category marked by the morpheme *can* or *could*, a word separate in the sentence from the verb but appearing in every sentence containing the category. This category is as much a part of the verb system of morphology as though it were denoted by a bound element in a synthetic Algonkian or Sanskrit verb; its morpheme *can* may replace co-ordinate elements in the same modal system, e.g. *may*, *will*, but it may not, like a mere lexical item (e.g. *possibly*) be simply added to them. In Hopi also there is a rigid system of mutually exclusive 'modalities' denoted by detached words.

A covert category is marked, whether morphemically or by sentence-pattern, only in certain types of sentence and not in every sentence in which a word or element belonging to the category occurs. The class-membership of the word is not apparent until there is a question of using it or referring to it in one of these special types of sentence, and then we find that this word belongs to a class requiring some sort of distinctive treatment, which may even be the negative treatment of excluding that type of sentence. This distinctive treatment we may call the REACTANCE of the category. In English, intransitive verbs form a covert category marked by lack of the passive participle and the passive and causative voices; we cannot substitute a verb of this class (e.g. *go*, *lie*, *sit*, *rise*,

² There is of course a minority group of possible or theoretically possible sentences, e.g. *The fish appeared*, in which plural is not distinguished from singular. But in actual speech such sentences are embedded in a larger context which has already established the plurality or the singularity of the thing discussed. (Otherwise such a sentence is not likely to occur.) Such minority types are not considered in the distinction between overt and covert, i.e. they do not prevent a category from being classed as overt. In covert categories the unmarked forms are relatively numerous, often in the majority, and are undistinguished even by context.

gleam, sleep, arrive, appear, rejoice) into such sentences as *It was cooked, It was being cooked, I had it cooked to order*. An intransitive thus configuratively defined is quite a different thing from the 'dummy' intransitive used in traditional English grammar; it is a true grammatical class marked by these and other constant grammatical features, such as non-occurrence of nouns or pronouns after the verb; one does not say *I gleamed it, I appeared the table*. Of course compound formations involving these same lexemes may be transitive, e.g. *sleep (it) off, go (him) one better*. In the American colloquial forms *go haywire, go South Sea Islander*, etc., the word or phrase after the verb is a covert adjective, cf. *go completely haywire*.

Another type of covert category is represented by English gender. Each common noun and personal given name belongs to a certain gender class, but a characteristic overt mark appears only when there is occasion to refer to the noun by a personal pronoun in the singular number—or in the case of the neuter it may be marked by the interrogative and relative pronouns *what, which*. The grammatical alignment is no less strict than in an overt gender system like that of Latin, where most nouns bear their gender mark. No doubt for many English common nouns a knowledge of actual sex and of scientific biological and physical classification of objects could serve a foreigner in lieu of knowledge of the grammatical classes themselves, but such knowledge would be of only limited use after all, for the greater part of the masculine and feminine classes consists of thousands of personal names, and a foreigner who knows nothing of the cultural background of Western European Christian names must simply learn, i.e. observe, that *Jane* belongs to the 'she' group and *John* to the 'he' group. There are plenty of names of overt similarity but contrasted gender, e.g. *Alice: Ellis, Alison: Addison, Audrey: Aubrey, Winifred: Wilfred, Myra: Ira, Esther: Lester*.³ Nor would knowledge of any 'natural' properties tell our observer that the names of biological classes themselves (e.g. *animal, bird, fish*, etc.) are 'it'; that smaller animals usually are 'it'; larger animals often 'he'; dogs, eagles, and turkeys usually 'he'; cats and wrens usually 'she'; body-parts and the whole botanical world 'it'; countries and states as fictive persons (but not as localities) 'she'; cities, societies, and corporations as fictive persons 'it'; the human body 'it'; a ghost 'it'; nature 'she'; watercraft with sail or power and named small craft 'she'; unnamed rowboats, canoes, rafts 'it', etc. The mistakes in English gender made by learners of the language, including those whose own languages are without gender, would alone show that we have here covert grammatical categories, and not reflections in speech of natural and non-cultural differences.

The classes of nouns based actually or ostensibly upon shape, in various American languages, may be either overt or covert. In Navaho they are covert. Some terms belong to the round (or roundish) class, others to the long-object class, others fall into classes not dependent on shape. No overt mark designates the class in every sentence. The class mark as in English gender is a reactance;

³ There are a very few names of indeterminate or double gender: *Frances (Francis), Jessie (Jesse)* or *Jess*, *Jean (Gene)*, *Jocelyn*, *Sidney*, *Wynne*, and perhaps a few others. The number is increased if we include nicknames like *Bobby, Jerry*, etc.; but all in all such cases are relatively so few that they in no way disturb our alignment of facts.

not a pronoun, however, but a choice between certain verb stems that go definitely with one class and no other, although there are very many verb stems indifferent to this distinction. I doubt that such distinctions, at least in Navaho, are simply linguistic recognitions of non-linguistic, objective differences that would be the same for all observers, any more than the English genders are; they seem rather to be covert grammatical categories. Thus one must learn as a part of learning Navaho that 'sorrow' belongs in the 'round' class. One's first and 'common-sense' impression of covert categories like English gender and Navaho shape-class is that they are simply distinctions between different kinds of experience or knowledge; that we say *Jane went to her house* because we know that Jane is a female. Actually we need not know anything about Jane, Jane may be a mere name; yet having heard this name, perhaps over the telephone, we say *What about her?* Common-sense may then retreat a step further and say that we know the name Jane to be given only to females. But such experience is linguistic; it is learning English by observation. Moreover it is easy to show that the pronoun agrees with the name only, not with the experience. I can bestow the name *Jane* on an automobile, a skeleton, or a cannon, and it will still require *she* in pronominal references. I have two goldfish; I name one *Jane* and one *Dick*. I can still say *Each goldfish likes its food*, but not *Jane likes its food better than Dick*. I must say *Jane likes her food*. The word *dog* belongs to a common gender class with a preference for *he* and *it*, but the gender-classed given name of a dog determines its own pronoun; we do not say *Tom came out of its kennel*, but *Tom came out of his kennel*, *Lady came out of her kennel*, *The female dog came out of its (or her) kennel*. 'Doggish' names like *Fido* are of the 'he' class: *Towser came out of his kennel*. We say *See the cat chase her tail*, but never *See Dick chase her tail*. The words *child*, *baby*, *infant* belong to the common class and can take *it*, but the given names of children take either *he* or *she*. I can say *My baby enjoys its food*, but it would be linguistically wrong to say *My baby's name is Helen—see how Helen enjoys its food*. Nor can I say *My little daughter enjoys its food*, for *daughter*, unlike *baby*, is grammatically in the feminine class.

Likewise with various covert categories of exotic languages; where they have been thought to be recognitions of objective differences, it may rather be that they are grammatical categories that merely accord up to a certain point with objective experience. They may represent experience, it is true, but experience seen in terms of a definite linguistic scheme, not experience that is the same for all observers. On the other hand, the distinctions between present and absent, visible and invisible, made in many American languages, may well represent experiential differences; and again we may have such experiential differences engrafted upon purely grammatical classifications, yielding mixed classes such as 'experiential-present plus grammatical-feminine'.

A covert category may also be termed a CRYPTOTYPE, a name which calls attention to the rather hidden, cryptic nature of such word-groups, especially when they are not strongly contrasted in idea, nor marked by frequently-occurring reactances such as pronouns. They easily escape notice and may be hard to define, and yet may have profound influence on linguistic behavior. The English intransitive verbs as configuratively defined above are a cryptotype. A similar

cryptotype comprises the verbs of 'copulative resolution' (*be, become, seem, stay, remain, etc.*), which also lack the passive and causative but may be followed by nouns, pronouns, and adjectives. Transitives (a cryptotype which includes *run, walk, return, etc.*—indeed most English verbs) possess the passive and causative and may be followed by nouns and pronouns but not by adjectives alone. Names of countries and cities in English form a cryptotype with the reactance that they are not referred to by personal pronouns as object of the prepositions *in, at, to, from*. We can say *I live in Boston* but not *That's Boston—I live in it*. A word of this cryptotype is referred to by *there* or *here* in place of *in it, at it, to it*, and by *from there (here)* in place of *from it*. In various American languages such place-names constitute a grammatical class; in Hopi they lack the nominative and objective cases, occurring only in locational cases; in Aztec they bear characteristic endings and exclude the use of certain prepositions.

English adjectives form two main cryptotypes with sub-classes. A group referring to 'inherent' qualities—including color, material, physical state (solid, liquid, porous, hard, etc.), provenience, breed, nationality, function, use—has the reactance of being placed nearer the noun than the other group, which we may call one of non-inherent qualities, though it is rather the residuum outside the first group—including adjectives of size, shape, position, evaluation (ethical, esthetic, or economic). These come before the inherent group, e.g. *large red house* (not *red large house*), *steep rocky hill*, *nice smooth floor*. The order may be reversed to make a balanced contrast, but only by changing the normal stress pattern, and the form is at once sensed as being reversed and peculiar. The normal pattern has primary stress either on the noun (*steep rocky hi'll*) or on the inherent adjective (*pretty Fre'nch girl*). We cannot simply reverse the order of adjectives and say *French pre'tty girl*—the form suggests a contrasted *French plai'n girl* but the pattern of so contrasting adjectives is un-English; the proper contrast is *plai'n French girl*. We can however reverse the adjectives by altering the stress pattern and say *Fre'nch pretty girl*, if in contrast with e.g. *Spa'nish pretty girl*, though such forms are clearly exceptional.

The contrasting term PHENOTYPE may be applied to the overt category and, when no ambiguity results, to the mark which accompanies the overt category in the sentence.

The distinction between overt and covert categories, or PHENOTYPES and CRYPTOTYPES, is one of two distinctions of supreme importance in the theory of grammatical categories. The other is the distinction between what may be called SELECTIVE CATEGORIES and MODULUS CATEGORIES.

A selective category is a grammatical class with membership fixed, and limited as compared with some larger class. A PRIMARY selective category, or LEXEMIC category, is one compared to which the next larger class is the total lexicon of the language. Certain semantic and grammatical properties are assured in the word by selecting it from a certain class of fixed membership not coterminous with the whole vocabulary. In order that a certain grammatical property may be 'in the lexeme' it cannot be in all lexemes. The familiar 'parts of speech' of most European languages, but not of English, are lexemic categories. The situation in English is peculiar, and will be touched upon later. Lexemic cate-

gories may be either overt or covert. Hopi is an example of a language in which they are covert. Possibly Maya may be another such case, though we lack clear information on that point. In Hopi there is no distinction in the simplex (bare stem) forms between nouns and verbs, and sentences are possible in which there is no distinction in the sentence. Thus *le'na* or *pam le'na* means 'it is a flute' and *pe'na* or *pam pe'na* means 'he writes it'. Hence nouns and verbs MAY BE alike in overt characteristics. But it is easily possible to make sentences in which *le'na* appears with case suffixes and in other forms quite impossible for *pe'na*, and vice versa. One has to learn, and cannot always tell from the sentence, that *le'na* and *pe'na* belong to different compartments of the lexicon.

It is probably more common to find lexemic classes that are overt, as in Latin, French, Aztec, Tübatulabal, Taos, and Navaho. In French, *ange* and *mange* belong to different compartments of the vocabulary (noun and verb) and there is always a feature in the sentence that tells which; one does not find such pairs as *il mange : il ange, c'est un ange : c'est un mange*. It may be possible to have *Angel* versus *Mangel*, but special and abbreviated types of sentence like these with their lack of formal distinctions do not justify calling the categories covert. In Latin, Aztec, Tübatulabal, and Taos, the distinction is marked not only in the sentence, but usually in the paradigm word itself. Yet this overt mark of the noun, verb, or other 'part of speech' cannot usually be transferred to a lexeme outside of the proper group. The mark that goes with a covert lexemic class need not stand for any other category such as case, person, or tense, though it does e.g. in Latin, Greek, and Sanskrit. The 'absolute suffixes' found attached to lexemic nouns in most Uto-Aztecan languages have basically no other character than that of such class-marks, though in Aztec they are also tied up with number; and needless ingenuity has been wasted in trying to make them out to be 'articles' or the like. The absolute suffixes in Taos go with the selective class of nouns but indicate gender and number also. In Latin the distinction between the nouns (including in this class the adjectives) and the verbs is selective and overt, but that between adjectives and substantives is selective and covert; compare *est gladius* and *est bonus*. As with all covert classes, the distinction is revealed upon forming the proper type of sentence; *est bona* occurs, but not *est gladia*.

Lexemic categories include not only nouns, verbs, adjectives, and other 'parts of speech', but also 'full' words and 'empty'⁴ words or stems, as in Chinese and perhaps the Wakashan languages, and still other types of distinction; e.g. in Algonkian the lexemic classes include large groups of stems having different combinatory powers and different positions in the verbal complex.

A modulus category is a non-selective category, i.e. it is generally applicable and removable at will. Depending on its type it may be applied either to any 'major word' (any word excepting small and specialized selective classes, e.g. 'particles'), or, more often, to any word coming within a certain pre-requisite

⁴ An 'empty' word or stem is probably one that is highly specialized for grammatical or syntactic indication, perhaps in a way that does not admit of being assigned a concrete meaning. For example, such a form might have no other meaning than to serve as the reactance of some other category, or as the signature of a modulus category (see the next paragraph).

larger category, which may be either selective or another modulus category. The cases, tenses, aspects, modes, and voices of Indo-European and Azteco-Tanoan⁵ languages are modulus categories, applicable at will to words belonging to the proper larger category—cases being moduli of the larger category of nouns; aspects, tenses, etc. moduli of the larger category of verbs. Hence the person versed only in Indo-European types of grammar poses to himself the distinction between selective and modulus classes (or between selectivity and modulation) as the distinction between 'parts of speech' on the one hand and 'grammatical forms' of the aspect, tense, and voice type on the other. But in widely different types of speech these familiar types of meaning and function cease to be associated with selectivity and modulation in the same way; entirely different alignments there hold sway in the grammar, and until this is recognized an adequate conception of the grammar cannot be obtained. It is not necessary to have large categories, such as nouns and verbs, in order to have such modulus categories as aspect. In Nitinat⁶ (and presumably in the closely related Nootka and Kwakiutl) all major words have aspects, such as durative, momentaneous, inceptive, etc.—both the word for 'run' and the word for 'house' always bear some element marking this aspect.

We may use the term modulus alone to denote the distinctive class meaning and function of the category; thus the present-participle meaning is a modulus in English. We may also use modulus to mean the grammatical operation of producing one such meaning, and hence, where no ambiguity results, to mean the element or pattern that marks the modulus. Thus we can say that in English the present-participle modulus is the suffixing of *-ing*, or for short that it is *-ing*. Where greater preciseness is desirable, we may call the overt mark the (or a) SIGNATURE of the modulus. This distinction is ultimately important; sometimes it is necessary to distinguish several signatures of the same modulus. In illustrating overt categories we cited the English noun-plural, which is a modulus category. The modulus, or plural type of meaning, is one and the same thing throughout the various examples; but the signatures whereby this plural modulus may be applied to the word *fish* are different from one example to the next. To these signatures we may add *-s* or *-es*, giving *fishes*. Since *sheep*, *deer*, *moose*, *caribou*, etc. belong to a cryptotype that excludes *-s*, and 'fishermen's fish' such as *trout*, *bass*, *salmon*, *mackerel*, *cod*, etc. (contrasted with 'low-grade fish', e.g. *sharks*, *skates*, *eels*, *sculpins*, etc.) belong to another such cryptotype, we cannot use this last signature for them. As this example shows, it is not necessary to have one-to-one correspondence between moduli and signatures. Where a high degree of such one-to-one correspondence obtains it has often been the custom to apply the graphic but not very scientific catchword 'agglutinative' to the language. Languages of the typical 'agglutinative' type, such as Turkish, have been referred to as if they had such one-to-one correspondence, and moreover as if they had no categories but modulus categories. The grammar of Yana (Hokan stock, California) consists largely of moduli, but has also a few selective cate-

⁵ B. L. Whorf and G. L. Trager, *The Relationship of Uto-Aztecan and Tanoan*, *American Anthropologist* 39.609-24 (1937).

⁶ See Mary Haas Swadesh and Morris Swadesh, *A Visit to the Other World: a Nitinat Text*, *IJAL* 7.3-4 (1933).

gories, e.g. a class of stems which must stand first in the verbal complex and a class which must stand second.

A distinction of the same semantic type as that between verbs and nouns in selective categories may be handled by modulus categories instead. That is, the possible moduli include not only voice, aspect, etc., but also VERBATION and STATIVATION.⁷ Whenever, as e.g. in Yana, the mere application of certain distinctive suffixes or other signatures makes a 'verb' out of any stem, then we do not have a class of verbs in the same sense as in French, Latin, Greek, Hopi, Axtéc, Taos, and Navaho, i.e. a selective class. We have verbatations instead of such verbs. The so-called verbs and nouns of Semitic are moduli, applicable to lexemes in general by signatures consisting largely of vowel-consonant sequence patterns, though there may be occasional gaps in the universality of lexical applicability. In Hebrew we have *e-e* as one of several signatures for stativation and *ā-a* as one of several for verbatation, e.g. *berek*⁸ 'knee' : *bārak* 'he kneeled', *derek* 'road' : *dārak* 'he marched', *geber* 'man, as virile or strong' : *gābar* 'he was strong', *hebel* 'cord' : *hābal* 'he bound', *melek* 'king' : *mālak* 'he reigned', *qedem* 'antecedence' : *qādam* 'he was before', *regel* 'foot' : *rāgal* 'he went on foot'. There are no doubt many Hebrew 'nouns' for which we do not know the verbatation form in texts, but this seems to be largely because the textual Hebrew that we know does not represent the full resources of the ancient living language; Arabic shows better the general applicability of these moduli to the great majority of lexemes. But verbs and nouns which are modulus categories may be found nearer home than Semitic. The lexicon of English contains two major selective divisions. One division, consisting mostly of long words and words with certain endings, contains selective verbs like *reduce*, *survive*, *undertake*, *perplex*, *magnify*, *reciprocate*, and selective nouns like *instrument*, *elephant*, *longevity*, *altruism*. A limited number of short words belong also to the group of selective nouns and verbs, e.g. *heart*, *boy*, *street*, *road*, *town*; *sit*, *see*, *hear*, *think*. In this selective vocabulary English is like French or Hopi. The other part of the lexicon, mostly the shorter words but some long ones, contains bare lexemes to which either verbatation or stativation may be applied at will, e.g. *head*, *hand*, *stand*, *walk*, *exchange*, *sight*, *skin*, *weave*, *dog*, *surrender*, *massage*, etc.⁹ This part of the vocabulary is like Arabic, though the signatures are of a quite different sort. Those

⁷ Stativation is a term used to denote the modulus of forms which are contrasted with verbatations in a way similar to that in which nouns, as a selective category, are contrasted with verbs in the languages that have such a contrast. It is used here instead of 'nomination' or 'nominalization' because these terms through past usage have come to suggest derivations rather than moduli, while 'stativation' helps us to think of the form not as a noun derived from a verb, but simply as a lexeme which has been affected by a certain meaningful grammatical coloring as a part of certain configurations.

⁸ Since these Hebrew examples are used only to illustrate vowel-patterns, they are written in approximate morphophonemic orthography, which does not attempt to show the distinction between the stops *b*, *g*, *k*, etc. and the spirants which replace them after vowels under regular statable conditions.

⁹ Adjectivation in English is another modulus which is applied both to bare lexemes and to selective nouns, but there are also selective adjectives, and these are not modulated into substantives.

for stativation include the articles, plural signatures, position after possessive pronouns and selective adjectives; those for verbatation include position after a nominative pronoun, position before a pronoun, noun, or stativation, the tense forms, the verbal auxiliaries and modal particles, etc.

There may be wide variability in the semantic relations between verbatations and stativations in the same language. When contrasted with the corresponding stativations, verbatations may seem to add in an inconstant manner such ideas as 'he engaged in' (*hunt, jump, dance*), 'behave like' (*mother, carpenter, dog*), 'be in' (*lodge, hive*), 'put in' (*place, seat, pocket, garage*), 'make, add, install' (*weave, plant, roof, pipe, tin*), 'take away' (*skin, peel, husk, bone*), 'get' (*fish, mouse*), 'use' (*spear, hammer, fiddle, bugle*); while on the other hand stativations seem to add inconstantly such ideas as 'result' (*weave, plant, form*), 'means' (*paint, trail*), 'action or place' (*walk, slide, step, drop*), 'instrument' (*lift, cover, clasp, clip*), etc. This inconstancy, or better elasticity, in certain aspects of the meaning, seen in Semitic as well as English, is characteristic of the simple moduli of verbatation and stativation, and it may be contrasted with the condition of having a number of different moduli, each a different specialized type of verbatation or stativation, which appears to be the situation in Alaskan Eskimo. It merely means that in a language with simple primary types of moduli the meaning of the individual lexeme is more or less under the sway of the entire sentence, and at the mercy of the manifold potentialities of connotation and suggestion which thereby arise.

Can there be languages not only without selective nouns and verbs, but even without stativations and verbatations? Certainly. The power of making predications or declarative sentences and of taking on such moduli as voice, aspect, and tense, may be a property of every major word, without the addition of a preparatory modulus. This seems to be the case in Nitinat and the other Wakashan languages. An isolated word is a sentence; a sequence of such sentence words is like a compound sentence. We might ape such a compound sentence in English, e.g. 'There is one who is a man who is yonder who does running which traverses-it which is a street which elongates', though the exotic sentence consists simply of the predicative lexemes 'one', 'man', 'yonder', 'run', 'transverse', 'street', and 'long', and the proper translation is 'A man yonder is running down the long street'. Such a structure might or might not be found in an isolating language; again it might or might not be found in a polysynthetic one like Nitinat. The polysynthetic language might or might not fuse some of the lexemes into long synthetic words, but it would doubtless have the power in any case of fusing in a great many aspectual, modal, and connective elements (signatures of moduli). Of such a polysynthetic tongue it is sometimes said that all the words are verbs, or again that all the words are nouns with verb-forming elements added. Actually the terms verb and noun in such a language are meaningless. The situation therein is radically different from e.g. Hopi, for though in the latter *le'na* 'it is a flute' and *pe'na* 'he writes it' are both complete sentences, they are words which are not equally predicative in all positions of a sentence, and they also belong to selective covert classes of noun and verb that in general take different inflections, and look alike only in particular types of

sentence. In Hopi the verb-noun distinction is important on a selective basis; in English it is important on a modulus basis; in Nitinat it seems not to exist.

So far we have dealt with categories which are distinct both configuratively and semantically, and these are the typical formulations of grammar. But we also have word groups which are configuratively distinct yet have no difference in meaning; these we may call *ISOSEMANANTIC* or purely formal classes. They in turn are of two sorts corresponding to selective and modulus in the semantic categories, but here better styled *SELECTIVE* and *ALTERNATIVE*. Selective isosemantic classes are typified by 'declensions' and 'conjugations', those very common features of languages the world over; richly developed in Latin, Sanskrit, Hopi, and Maya, less developed in Semitic, English ('strong' and 'weak' verbs), and Aztec, and almost lacking in Southern Paiute. They also include gender-like classes without semantic difference, as in Bantu and in certain of the genders of Taos (all these might be called 'declensions' with pronominal agreement or the like); classes requiring different position in a sentence or complex without difference in type of meaning (stem-position classes in Algonkian); and classes requiring different signatures for the same modulus without difference in type of meaning, e.g. in Hebrew the segholate (*e-e*) 'nouns' and parallel stativation-groups. Alternative isosemantic classes are what their name implies, e.g. the English group comprising *don't*, *won't*, *shan't*, *can't*, etc. and the group of *do not*, *will not*, *shall not*, *cannot*. In this case we could perhaps speak of a modulus of brevity, convenience, or colloquial attitude which is applied in the former group. Alternative classes sometimes show *STYLISTIC* as opposed to grammatical difference. In other cases there seems to be no generalizable difference, as in English *electrical*, *cubical*, *cyclical*, *historical*, *geometrical* versus *electric*, *cubic*, *cyclic*, *historic*, *geometric*.

There remains another type of distinction: *SPECIFIC CATEGORIES* and *GENERIC* ones. A specific category is an individual class existing in an individual language, e.g. English passive voice, Hopi segmentative aspect. A generic category, in the restricted sense of application to a particular language, is a hierarchy formed by grouping classes of similar or (and) complementary types, e.g. case in Latin, voice in Hopi. Here much depends on both the insight and the predilections of the systematizer or grammarian, for it may be easy to build up specific categories into very logical schemes, yet what is rather desired is that such generic categories should represent systems which the language itself contains. We do well to be skeptical of a grammarian's systematization when it is full of *ENANTIOMORPHISM*, the pairing with every category of an opposite which is merely the lack of it. Specific categories of seemingly opposite meaning such as passive voice and active voice (when this term 'active' means merely 'non-passive') should be brought into one generic category ('voice') only when they are more than two, or when, if only two, taken together they contrast as a unit with some other system of forms.

Finally, in a still wider sense generic categories may be so formulated as to become equivalent to the concepts of a general science of grammar. Such categories are made by grouping what seem to us to be *SIMILAR SPECIFIC CATEGORIES IN DIFFERENT LANGUAGES*. Only in such a sense can we speak of a

category of 'passive voice' which would embrace the forms called by that name in English, Latin, Aztec, and other tongues. Such categories or concepts we may call **TAXONOMIC** categories, as opposed to **DESCRIPTIVE** categories. Taxonomic categories may be of the first degree, e.g. passive voice, objective case; or of the second degree, e.g. voice, case. Perhaps those of the second degree are the more important and ultimately the more valuable as linguistic concepts, as generalizations of the largest systemic formations and outlines found in language when language is considered and described in terms of the whole human species.

LINGUISTIC BORROWING AND HISTORICAL EVIDENCE

MYLES DILLON

UNIVERSITY OF WISCONSIN

I

The intensive-durative prefix **ande-* which appears in Ir. *andfocul*, *annocul* 'habitual saying' (cf. G *Anderoudus* 'sehr rot', Pedersen, VKG 2.10) can also be identified in the following Irish words:¹ *an[d]-ainmne* 'perseverance', LB 261b26 (= ACL 3.320.17, where 23 N 10 reads *ainmnet* against the metre: the text has been assigned to the 9th century by Strachan, Trans. Phil. Soc. 1894.516); *and-glondas* 'habitual cruelty' (A1 2 168.5 = O'Dav. 135); *and-locht* 'habitual fault'; *and-lonn* 'condiment'; *Andobor* 'the river Anner'; *andord* 'musical strain'; *and-ró* 'trouble'.

Pedersen identifies G *ande-* with Skr. *ádhi* < **ñdhi*, and regards Ir. *ind-* as the regular form, which he sees in Mid. Ir. *indeoin* 'anvil' (VKG 1.114) and *indile* 'cattle' (1.115, 148) as well as in the preverb *ind-* (1.45; 2.298); such words as *andlonn* 'condiment', and *enbruthe* 'soup', which he includes here, would owe their irregular vowel to British influence (1. 45). The prefix appears in Welsh according to Pedersen in the form *en-*, apparently generalized from cases where it had suffered vowel-affection (umlaut); *en-wir* 'trustworthy'; *en-wyn* 'pure white'; but also *en-fawr* 'huge'.² The borrowing into Irish could of course have occurred before the period of vowel-affection in Welsh. Even such old formations as *and-focal*, *an[d]-ainmne* would then be hybrids, since *focul*, *ainmne* are not British loanwords. Thurneysen, however, suggests that **ande* was the common Celtic form of the preposition (Hdb. 473) with which the Irish prefix is identical; and this doctrine is to be preferred.³ If Thurneysen is right, Pedersen's explanation of *indeoin* and *indile* must be rejected. Ir. *enbruthe* 'soup' (later *anbruiithi*) is better explained as Cormac himself explains it: *enbruithe .i. usce bruite* (*.i. feola*), Corm. Y 525, the first syllable being *en* 'water'. Even if Pedersen's view be accepted, the word does not fit into the Irish series, and we should have to assume that here the Welsh prefix was borrowed later in the form *en-*.

¹ Where no other reference is given, the examples will be found in Meyer's Contributions to Irish Lexicography. (This paper was read at a meeting of the Linguistic Institute in Madison, in July 1944. It has benefited by the criticism of some of those who heard it.)

² It is noteworthy that all the adjectives cited as examples of this prefix have *en-*: *enfawr*, *enrhyfedd* 'wonderful', *enwir*, *enwyn* (Pedersen, VKG 2.10); *enbyd* 'dangerous' (Morris Jones, Welsh Gr. 269, who postulates **ñdo-*); and to these may be added *enddawd* 'conspicuous', *enwaered* 'prone', *enwair* 'vigorous', *enwaisg* 'lively'. Nouns have *en-* or *an-*: *enawel* 'tempest', *enchwardd* 'laughter', *enddwyl* 'affection', *enfyged* 'worship', *enrhydedd* 'honor' beside *anfon* 'to send', *annerch* 'greeting', *anrhaith* 'booty', *anrheg* 'gift'. I suggest that W *en-* represents an original **eni-*, and is to be kept apart from Irish *and-*. The W nouns that have *an-* may well contain the same prefix as the Irish nouns.

³ Professor Goetze calls my attention to Hittite *hanti* 'especially' (Sturtevant, Hittite Gr. 87, 124), which is semantically close; but if the identification of *hanti* with Lat. *ante* is correct, a connection with Gaulish *ande-* is not evident. Gothic *anda-* might be considered.

II

Professor T. F. O'Rahilly has put forward the theory that much of the British element in Irish is due to the presence of a pre-Goidelic substratum of 'Brittonic' speech in Ireland (Proc. Brit. Acad. 21.323 [1935]). He supports it with a list of common Irish words such as might not be expected to be the result of cultural borrowing, and draws the conclusion that these words were borrowed on Irish soil from speakers of a Brittonic form of Celtic who were settled in Ireland before the Goidels came. But no demonstration is achieved. His list includes the words *andlonn*, *enbruthe*, and *capall* 'horse', all of which are at least doubtful.⁴

O'Rahilly observes that a Brittonic origin is not equally certain for all the words he cites, and claims that his argument would be unaffected if some of them could be shown to be non-Brittonic. But it would be affected in exact proportion to the number of words rejected. It seems to me that the argument can only be stated fairly when all doubtful words have been excluded. It would be necessary first to establish a valid etymology for each word claimed as Brittonic, since the pre-Celtic element in Irish and Welsh may well be great, and is of unknown and perhaps common origin. Then the first occurrences in Welsh and Irish respectively would need to be dated. O'Rahilly suggests that the reason why many of the words in question do not in fact appear early in the literature is that they were of lowly origin, borrowed from the speech of a subject race; and this argument is hard to measure. How late in history were these borrowings still being made? Would they still have been felt as non-literary by the 11th century? How many centuries would it take for a word to acquire respectability? To the last question I suppose that no answer is possible. But if it could be shown for any one of the words cited that it was common in Welsh literature in the 12th century, and that it does not appear in Irish before the 17th century, O'Rahilly's argument would be weakened in the particular case.

The whole question of linguistic borrowing is involved. The assumption that familiar words are less likely to have been borrowed from outside than from a language spoken on Irish soil is plausible, but hardly necessary. Given the fact that there was a Brittonic lower dialect in Ireland when the Goidelic dialect became dominant, it would be reasonable to explain the Brittonic loanwords in Irish as the result of the presence of this substratum. But it is not, I think, admissible to use them as evidence of the fact. The matter is discussed by Bloomfield, *Language* 444-95. He distinguishes between 'cultural' borrowing from a neighboring language, and 'intimate' borrowing from a language spoken in the same area as the borrower. For intimate borrowing he arrives at the formula that in all cases 'it is the lower language which borrows predominantly from the upper' (464). This is indeed the doctrine of Windisch,⁵ and it has been accepted by Jespersen.⁶ It would seem to imply that any of the Indo-European languages which survived in a conquered territory—Sanskrit, Greek, or Latin,

⁴ Pokorny has sought to explain *capall* as a blend of *caballus* and *capellus*, and regards *W ceffyl* as the borrowed form.

⁵ *Zur Theorie der Mischsprachen und Lehnwörter*, Ber. u. Verh. d. Sächs. Ges. d. Wiss. 49.101 (1897), which is not available to me.

⁶ *Growth and Structure of the English Language* 38.

for example—must not be supposed to have borrowed freely from the speech of the peoples they subdued. But the doctrine is open to question. The fact is that the number of words in the vocabulary of any of the known forms of Indo-European for which sound etymologies have been established is relatively small. The mass of words cannot be shown to be of Indo-European origin (Meillet, *Introduction* 383). O'Rahilly's proposal may not, therefore, be dismissed as *prima facie* improbable from the point of view of a linguist.

In the case of 'cultural borrowing', much depends upon the degree of intimacy between the two peoples concerned, and the degree of mutual intelligibility of their languages.⁷ Evidence of close contact between Ireland and Wales is plentiful from the earliest period of history down to the time of Gruffydd Ap Cynan (11th century) and later, and the probability is that this contact reaches far back into prehistoric times, when Ireland was exporting gold, and importing tin from Cornwall. The contact with the Britons of Strathclyde must have been specially close, to judge from the historical sagas. Zimmer pointed out that intercourse between Ireland and Wales must have been easier and safer in early times than intercourse between the Irish dwelling on the coast and those in the interior. There were Irish settlements in Wales and British settlements in Ireland. But I need only to refer to the excellent summary by Cecil O'Rahilly (*Ireland and Wales* 35–80). As regards intelligibility, it is likely that before the loss of final syllables and syncope of internal syllables in Irish, say down to the 5th century, Irish and Welsh were not so widely different as to form a strong barrier. The border-dwellers on each side probably had to make no great effort in order to communicate with each other, and we may suppose that bilingualism was not uncommon. Pedersen holds that Irish is flooded with British loanwords, both learned and familiar, and suggests that the Irish colonies in Wales may have been partly responsible (VKG 1.22–4).

If it could be shown that 'cultural borrowing' is commonly confined to non-familiar words, O'Rahilly's argument would be strengthened.⁸ But there is evidence to the contrary. The French borrowings in Italian include such common words as *arrivare, formaggio, giardino, giorno, mangiare, trovare, viaggio*.⁹ Ir. *garsún* < Fr. *garçon*, Ir. *páisde* < Eng. *page* are similar instances. Fr. *caleçon* is borrowed from Italian (*calzone*). Bloomfield maintains that 'intimate borrowing' by a lower from an upper language is usually limited to non-familiar words, but even there the example of Scandinavian loanwords in English shows that the borrowing may extend to familiar words. He observes that they 'do not conform to the type which an upper language leaves behind. They are restricted to the intimate part of the vocabulary: *egg, sky, oar, skin, gate, bull, skirt, fellow, husband, sister, law, wrong, loose, low, meek, weak, give, take, call, cast, hit*', and

⁷ See M. Bartoli, *Archivio Glottologico Italiano* 21.90 (1927).

⁸ I leave out of account other reasons for rejecting his main thesis that the early Celtic invaders of Ireland were Brittonic speakers (P-Celts), and that the Goidels are descended from a settlement made by the Helvetii after the battle of Annecy. See Vendryes, *Études Celtiques* 1.352; Mahr, PPS 1937.402.

⁹ For *giorno* see now L. Spitzer, *Studies in Philology* 37.578 (1940). This brief list could be greatly extended. I owe the information to my friend Giulio Bonfante. Meyer-Lübke refers to the influence of French upon Italian, *Hist. Fr. Gr.* 3 22.

the words *though, they, their, them* (Bloomfield, *Language* 468). Bloomfield calls this 'aberrant borrowing', and suggests that the status of the languages in relation to each other may have varied with place and time. Jespersen discusses the matter at length, and maintains likewise that this exception to the theory of Windisch in no way invalidates that theory, and can be used as evidence of 'a more intimate fusion of two nations that is seen anywhere else' (*Growth and Structure*⁴ 77).¹⁰ I mention the point here only as evidence of the uncertainty that must be allowed for in such matters. The general lesson of linguistics seems to be that we must be satisfied to observe what has happened and seek to explain it. It is not safe to suppose that something cannot happen, as in this case to suppose that the common Irish word *nós* 'custom' cannot have been borrowed from Welsh (*naws*). It seems that there is no limit to the extent or to the kind of borrowing from British (i.e. Welsh or an earlier state of that language) into Irish that we may expect, and that O'Rahilly's theory gains no support from the list of loanwords he presents.

III

Setting aside the case of Ireland and Wales, where long and intimate contact allows for unlimited 'cultural' borrowing, it would be helpful if we could arrive at a probable opinion in the matter of 'intimate' borrowing of vocabulary from a lower into an upper language. Paul (Prinzipien⁵ 393) dismisses the question briefly. He points out that borrowing of foreign words may be occasioned by necessity, the need of names for new notions; and he cites place names, personal names, and, in the sphere of 'cultural' borrowing, the names of products imported from abroad. As an occasion of borrowing from a lower into an upper sphere of culture, Paul mentions the need of a description of native conditions in the lower sphere, either for instruction or in poetry. A contrast between 'cultural' and 'intimate' borrowing in Bloomfield's sense is not sharply drawn. Paul merely says that where two nations occupy the same area, the language of the nation that is dominant, whether by weight of numbers or political power or cultural superiority, will prevail, and the lower language will leave stronger or weaker traces of influence upon the upper 'according to its power of resistance' (391). He sees, therefore, no objection to 'intimate' borrowing from below. Bloomfield, on the other hand, regards it as abnormal.¹¹ Meillet avoids the question of vocabulary in his monograph *Sur les effets des changements de langue* (*Scientia* 1932.91 = *Linguistique historique et linguistique générale* 2.104), and limits the discussion to phonology and grammar. But in the chapter on vocabulary in his *Introduction* he expresses the opinion that a great part of the vocabulary of any of the Indo-European languages may have been borrowed from the languages of the conquered peoples (*Introduction*⁷ 383). This opinion seems to me more probable than that of Bloomfield. Pokorny states as a rule that the upper lan-

¹⁰ He shows, by the way, that there is a group of non-familiar words, consisting of legal terms, among the Scandinavian loan-words, *ib.* 72.

¹¹ Technical terms proper to the trade or industry of the 'lower' people constitute, of course, a special case, of which *Lat. bos* is the typical example.

guage becomes dominant in vocabulary and inflexion, the lower language in phonology and syntax.¹²

It may be possible to arrive at an opinion based upon observation of contemporary conditions. Scotland, Wales, and Ireland are good fields for a study of the question. Mexico and the countries of South America offer the same opportunity. In these areas we can observe two languages in rivalry, the 'lower' language in varying states of existence. For Ireland, which I know well, I find that I am in doubt about simple facts. In Co. Roscommon, where Irish is extinct, save perhaps for a few old speakers,¹³ an unpaved way between hedges or banks is a *boreen* (Ir. *bóithrín* 'little road'). In Co. Dublin it is a *lane* as in England. Is the word *boreen* understood in Co. Dublin? Which word is common in Meath, in Longford, in Cavan, in Tipperary? The Irish word for a shoat, or young weaned pig, is *banbh*, and is current in the English of Co. Roscommon in the Irish form [banəv]. It has been borrowed into the standard English of Ireland in the form written 'bonham', where the final 'm' represents, I suppose, a nasal quality of the [-v]. I doubt whether the word *shoat* is used anywhere in Ireland. A linguistic atlas of the Irish dialects has long been desired. An atlas of the English dialects of Ireland might prove no less interesting.

The conclusion that I would suggest is not that we should dismiss the idea of formulating a positive doctrine, but that there is room for investigation. Bloomfield and Meillet have held opposite views, so far as I can see, and Meillet's view seems to me that the more probable. I do not propose that every Latin word, or every English word, for which no convincing etymology can be given, should be labelled non-Indo-European. Any number of 'roots' may have been lost in the kindred dialects. But I cannot see any objection to holding that any or all such words may be non-Indo-European, whatever their number and whatever their meaning, in the absence of any clear evidence to the contrary.

In Wales and in Ireland the investigation would need to be made soon, for the schools have been at work for a long time, and the influence of writing, which is dominated by standard English, must be taken into account. But perhaps it will, indeed, be found that no general formula such as that proposed by Bloomfield can safely be drawn up, since the historical conditions vary in different cases. Professor Goetze maintained in a recent conversation that the problem is historical rather than linguistic, and should be approached from the historical point of view. And the historical conditions in the period of early Indo-European migrations are unknown.

Studies of linguistic areas in South America, for example, where the historical conditions are well known, may lead to interesting results. And in this connection it may be observed that the theory of Lenz (to which Bloomfield refers, Language 469), with regard to the influence of the Indian vernacular upon

¹² ZCP 16.97-8. The question of the substratum is here discussed with citation of many authorities. Pokorny's formula is not supported by the evidence presented by Rohlf from southern Italy, where the Greek substratum appears to have influenced syntax and vocabulary in Italian, but not phonology, and the areas in which Greek is still spoken betray the influence of Italian phonology. See Germanisch-Romanische Monatschrift 18.37-56 (1930).

¹³ The revival of the language in the schools has no bearing on the question.

Chilean Spanish, has now been refuted by Amado Alonso, who shows that Lenz failed to take account of phonetic features proper to the dialects of other areas in South America and of Spain itself (RFH 1.313 [1939]).¹⁴ Little has yet been done in this kind of research, so far as I know.¹⁵ But it may be that we can learn enough in these favored areas to establish valid criteria by which linguistic borrowing can be used as historical evidence, even if no general principle can be applied.

¹⁴ I owe this reference to Professor Neale-Silva. Thurneysen suggested that Pokorny's proof of a Hamitic substratum in Irish might be invalidated by an investigation of the syntax of popular speech in areas not suspect of Hamitic influence (ZCP 18.428). Havers' *Handbuch der Syntax* (1931) seems to support his suggestion, e.g. in the discussion of parataxis (169) and of the nominative case as a caseless form (2, 58, 68).

¹⁵ Alonso outlines the method that is possible for South America with the abundant evidence available, RFH 1.349 (1939). He discusses the work that has been done, *Substratum y Superstratum*, RFH 3.209-18 (1941), with special reference to vocabulary on 216.

THE TOCHARIAN PALATALIZATION (I)

GEORGE S. LANE

UNIVERSITY OF NORTH CAROLINA

[This is intended as the first of a series of detailed discussions of the so-called Tocharian palatalization. All that is attempted here is an examination of the actual appearance of the sound change, to determine what are the original and what are the secondary consonants.]

Few detailed studies of the so-called Tocharian palatalization have appeared, though off-hand mention of it has been current. Perhaps the first serious treatment was that by W. Schulze in an article dealing with the reduplicated preterit in Tocharian and Germanic (BSB 166-74 [1924], phil.-hist. Kl. = Kl. Schr. 239-48),¹ but there the discussion was only incidental to the main topic. Recently two more discussions have appeared, one by A. J. van Windekens in his monograph *De indo-europese Bestanddeelen in de tocharische Declinatie* 56 ff., esp. 66 (Louvain, 1940), the other by H. Pedersen in his recent volume *Tocharisch vom Gesichtspunkt der indoeuropäischen Sprachvergleichung* 235 ff. (Copenhagen, 1941).

That the subject is a confused and difficult one is generally recognized—but so are most of the problems of Tocharian phonology. And perhaps in this case, as already in others, we have been too prone to jump at conclusions by drawing analogies from our experience in other languages. Indeed the very term 'palatalization' shows our preconception of the nature of these consonant changes before we have established their conditions. In fact, even the consonant changes themselves are established only in the most general outlines.

There is general agreement however that the affricates *c* [tʃ'] and *ts*, the sibilants *ś* and *š*, the nasal *ñ*, and the lateral *ly* have, in most instances at least, arisen secondarily. And there is also general agreement that both *c* and *ts* arise from dentals which are normally reflected by Tocharian *t*; that *ś* arises from *s*, and *š* from velars, labio-velars and palatals which appear usually as *k*; and that *ñ* and *ly* reflect normal *n* and *l*. There is less agreement that *my* and *py* bear a

¹ The less obvious abbreviations used in this article are: BSB = Sitzungsberichte der Preussischen Akademie der Wissenschaften zu Berlin; Kl. Schr. = W. Schulze, *Kleine Schriften*, Göttingen, 1933; SSS = E. Sieg, W. Siegling, und W. Schulze, *Tocharische Grammatik*, Göttingen, 1931; WP = Walde-Pokorny, *Vergleichendes Wörterbuch der indogermanischen Sprachen*, Berlin, 1930-32; WH = Walde-Hoffmann, *Lateinisches etymologisches Wörterbuch*, 3d ed., vol. I, Heidelberg, 1938; BSOS = Bulletin of the School of Oriental Studies of the University of London; KZ = (Kuhn's) *Zeitschrift für vergleichende Sprachforschung*, etc.; IF = *Indogermanische Forschungen*; Phil. Stud. = *Philologische Studien* (Université Catholique, Louvain); JAs. = *Journal Asiatique*; MSL (BSL) = *Mémoires (Bulletin) de la Société de Linguistique de Paris*; AOr. = *Arkiv Orientalni* (Prague); Frag. = S. Lévi, *Fragments de Textes Koutchéens*, Paris, 1933. The oft cited monographs of van Windekens and Pedersen (above) are abbreviated respectively as Toch. Decl. and Toch.

similar relationship to *m* and *p*, or that *y* may be actually the 'palatalized' form of *w*.²

In view of this nebulous situation, it seems to me that it might perhaps be profitable to review the whole phenomenon without prejudice, in the first place to establish once and for all, if possible, what its appearance actually is; and then, but only later, when we are sure of this, we should examine the phonetic conditions which have led to the changes under consideration. For any one who has been over the ground already, the prospect of a review in the latter regard is anything but encouraging.

Now in dealing with such a phenomenon as palatalization in Tocharian, or in any language for that matter, it is patent that we should be extremely careful to base our conclusions on its appearance in isolated forms, where sound laws have perhaps had the best chance to take their course unmolested by the analogy of grammatical categories. Hence we should avoid in Tocharian particularly the use of forms from preterit, subjunctive, and imperfect stems where palatalization seems to have acquired a functional significance (cf. SSS 349 f.).

In taking up the first of our assigned tasks, a clarification of the actual appearance of the sound change, we shall consider the altered consonants in the order mentioned above: *c*, *ts*, *ś*, *š*, *ñ*, *ly*, *my*, *py*, *y*.

1. That *c* is normally a reflex of Tocharian *t* is generally agreed, and seems particularly clear from such internal relations as *cāmp-* 'be able' beside *tampe* 'might'; A *cmol*, B *cmel* 'birth' beside A *tām-*, B *tām-*, *tem-* 'be born'; or the second singular pronoun obl. A *cñ*, beside nom. *tu*; and the masculine singular demonstrative obl. A *cam* beside the corresponding feminine *tām* or neuter *tām*, etc.

As regards the original (Indo-European) order of the dental involved, we are, in most cases, dealing with the voiceless unaspirated stop, and so in the last two instances cited above, and clearly also in the case of the primary endings of the second and third persons plural in A, e.g. *-c* and *-ñc*, from IE *-te* and *-nti*. But we cannot assume, with van Windekens (Toch. Decl. 62), that this is always the case, nor can we assume that *ts* (below) is reserved for the Indo-European aspirates, though entirely unimpeachable etymologies are to be desired. However, A *ckācar* 'daughter' certainly shows *dh* reflected by *c* in that dialect, though B *tkācer* shows the initial dental unaltered. Likewise A *cmol*, B *cmel* 'birth', already cited above beside the verb, are quite plausibly to be derived from the root seen in Skt. *dhāman-* 'dwelling place', Av. *dāmi-* 'creation', Lat. *familia*, etc. The evidence of the subjunctive middle verb forms A *cmatār*, B *cmetār* from this root, like that of the preterit A *casās*, *casār* from *tas-* (*tā-*, *tās-*) 'put, lay' (IE *dhē-*), would of course by itself be inconclusive for the reason mentioned above. According to V. Pisani (KZ 62.43), we could add here A *mārc* 'head' as from IE **m̥dh-*: Skt. *mūrdhan-* etc., but the connection of the latter with OE *molda* may seem preferable to many.³ On the other hand, van Windekens'

² That some of these consonants may also arise in totally different fashion is likewise recognized. For example, *ts* may come from *t* + *s* as in *lāntseñc* 'they go out', *letseñc* 'they depart(?)', where the verbal root ends in *t* and the present suffix is *-(ā)s* (cf. Pedersen, Toch. 263, SSS 358 ff.). Likewise, inherited *s* always appears as *š* before *t* in A as contrasted to B, e.g. A *štām*, B *stām* 'tree' (see below).

³ Cf. WP 2.295.

connection of *mrāc* with Gk. *βρεχμός*, *βρέχμα*⁴ is surely to be rejected on the ground that Toch. *c* cannot reflect the Indo-European gutturals (see below). Another possible example of IE *dh* reflected by *c* would be perhaps A *cok* 'lamp', B *cauk-* 'light up', if from the base **dheu-* seen in Skt. *dhavala-* 'dazzling white', Gk. *θοός* *λαμπρός* (Hesych.), etc., as I have already suggested elsewhere.⁵

Furthermore *c* seems to reflect the voiced unaspirated dental in A *koc*, B *kauc* 'high', IE **gou-d-*, cf. Skt. *kakud-* 'summit' (beside **gou-q-* in Goth. *hauhs*, etc.),⁶ and possibly also in A *plāc* 'word' : Gk. *φλεδών* 'chatter', according to van Windekens.⁷ The same scholar's connection of *pāci* 'right' (? 'right' or 'left', SSS) with the root of OHG *fazzōn* 'seize' (IE **ped-*)⁸ seems too doubtful however to cite for further support.

It was often assumed earlier, but more recently also by van Windekens (cf. above), that *c* may also reflect an Indo-European guttural. I am able to verify this only after nasals, e.g. A *añcāl* 'bow' : Gk. *ἀγκύλος* 'bent', OHG *angul* 'hook' etc.; B *eñcimar*, *eñcitrā*, opt. 1 and 3 sg., beside *eñkastrā*, 'takes' : Gk. *ἐνεγκεῖν*.⁹ (On A *emts-*, cf. below). Pedersen¹⁰ has indicated that this is purely a secondary development, by way of *ñ + śi > ñci*, analogous to that seen in possessive adjectives like A *atroñci* (from *atār* 'hero') or *k^uleñci* (from *k^ule* 'woman'), which contain a double suffix *-(e)ṃ + śi*. Thus the guttural has here its normal palatalization to *ś* first (see below).

2. That *ts* is also of dental origin seems clear. Clean-cut etymologies like A *tsek-*, B *tsaik-* 'form, mould' : Skt. *dih-* 'anoint', Lat. *tingo* 'form', or A, B *tsāk-* 'burn' : Skt. *dah-* 'burn', Gk. *θεπτανος* (Hesych.) 'kindled', *τέφρα* 'ashes', Lith. *dėgti* 'burn', prove conclusively that it may reflect IE **dh-*. But that this is the only origin, as van Windekens (Toch. Decl. 46) would maintain, seems to me unlikely, for I would hesitate to discard the connection of A, B *tsār-* 'divide' with Gk. *δέρω* 'flay', Goth. *dis-tatran* 'tear apart' etc. (IE **der-*),¹¹ or that of A *tsuk-*, B *tsauk-* 'drink' (pret. and subj. stem of *yok-*) with Lat. *duco*, etc.¹² Even clearer is the evidence that *ts* may reflect IE *t*, e.g. A *pats* 'husband' : Skt. *pati-* 'lord'; A *lānts*, B *lāntsa* 'queen' (**wlantya-*); A *klots*, B *klautso* 'ear' : Av. *sraota-* 'hearing', Goth. *hliup* 'hearing, attention'; A *tsru* 'little' : Gk. *τέπυς* 'weak'¹³ etc. The frequent assumption, however, that *ts* may represent an original guttural has, for the most part, poor etymological support. The best is possibly van Windekens' suggested connection (Toch. Decl. 58 f.) of A *tsār-w-*, B *tsār-w-* perh. 'take courage' (= Skt. *ā-śvas-*, *pra-grah-*¹⁴) with Skt. *hāryati* 'desires',

⁴ BSOS 10.939.

⁵ LANG. 14.27.

⁶ Ibid. 26; Pedersen, Toch. 266.

⁷ Toch. Decl. 56; so already Holthausen, IF 39.66.

⁸ Phil. Stud. 183-5.

⁹ Meillet, JAs. 17.451 (1911), MSL 17.248.

¹⁰ Toch. 96, 251.

¹¹ Poucha, AOr. 2.325.

¹² LANG. 14.27; cf. also now Pedersen, Toch. 190, anm. 2.

¹³ Pedersen, Toch. 243 f.

¹⁴ Cf. SSS 481, Lévi, Frag. 152.

Gk. χαίρω 'rejoice' etc. The lack of a formation in *-(e)u-* from this base is however against the etymology. Even less likely on grounds of formation seems to me the same scholar's connection of A *tsru* 'little' (cf. above) with Skt. *hrasva-* 'short'. Schwentner's connection (IF 57.251) of A *tsār* 'rough, sharp' with Skt. *khara-* 'hard, rough' is not objectionable in itself, but should perhaps be discarded in favor of Pedersen's suggestion (Toch. 242 f.) of relationship between *tsār* and *tsrasi* 'strong', B *tsirauñe* 'force'. The one remaining apparent example of guttural origin for *ts* is then the oft cited A *tsar* 'hand' : Gk. χείρ. However, the corresponding B *šar* was always embarrassing. As Pedersen notes (Toch. 236), however, the Hittite *kessar* (*ki-eš-šar*) indicates that this was not a direct development of the guttural, but rather by way of syncope from PToch. **šesar* to **šsar* > **ššar*, whence simplification of the initial cluster to *ts* in A but *š* in B. And furthermore, Pedersen¹⁵ disposes, in similar fashion, of the bothersome A *emts-* 'seize' beside B *eñk-*, *eñc-* (above under *c*). Presumably the *ts* arose in the infinitive suffix *-ti*, i.e. original *ñk-ts* > *ñts* > *nts* (*m̐ts*), and thence *ts* spread throughout the paradigm in place of *ñk* (or *ñc*, its palatalized form) in dialect A but not in B. Support for this view is afforded by the related A *emts* 'selfishness', which shows the same change also in B *entse* 'greed'. The suffix here was probably *-tyo-*.

With regard to the further change of *ts* to *š*, see below.

3. As a product of palatalization, *š* has several origins. The most immediate seems to be any of the various Indo-European gutturals, though, apparently by chance, clear-cut examples of a few of these are lacking.

Of the palatals, IE *k̑* may be reflected in B *aistrā* 'vijānāte' beside *aikemar* 'janāmi' : Goth. *aih* 'owns', Skt. *iśe* 'rule, am able';¹⁶ and IE *ǵ* is evident in A pres. mid. sg. 3 *āstrā*, pres. pple. *āśant* beside pres. act. pl. 3 *ākeñc*, from *āk-* 'lead' : Gk. ἄγω, Skt. *ajāmi* etc., and is probably likewise to be recognized in A and B *šwā-*, *šu-* 'eat' as from *ǵyew-*, cf. OE *cēowan*, OHG *kinuan*, Russ. *žujú*, *ževát* 'chew', etc.¹⁷ IE *ǵh-* seems probable for A *šew-* 'gape, yawn' : OHG *ana-giwēn*, Lat. *hiāre*, OCS *zeja* 'gape', Skt. *vi-jihīte* 'gape apart'.¹⁸

For the plain velars there is little definite evidence. IE *k* may be reflected in A *šisri* perhaps 'points (of the ears)',¹⁹ which might thus be a reduplicated form from the same root as Lat. *crīnis*, *crista*,²⁰ and in A *šur-* 'be sad, care', possibly : Gk. *κοίω* 'notice', Skt. *kavi-* 'wise; poet' etc.;²¹ but neither etymology is particularly convincing. As for B *šauk-* 'call' one can compare equally well either Lith. *šaukti* or *kaūkti*, and A *šanwem* (dual) 'cheeks' is of course to be connected with Gk. *γένυς*, Goth. *kinnus*, Skt. *hanu-*, a group with particularly

¹⁵ L.c. fn. 1.

¹⁶ Pedersen, Groupement des dialectes indo-européens 31.

¹⁷ But there is of course evidence for a parallel root in *g-*, cf. WP 1.642. The connection with Skt. *śavas* 'strength', *śūra-* 'strong; hero', etc. (WP 1.365) made by Fraenkel (IF 50.7) is much less preferable.

¹⁸ WP 1.548 f.

¹⁹ Cf. Sieg, Aufsätze Kuhn 151, lines 5-6.

²⁰ WP 2.572, WH 1.292.

²¹ Van Windekens, BSOS 10.397 f.

ambiguous initial.²² Likewise in the case of A and B *špāl* 'head' beside Gk. κεφαλή, OHG *gebal*, the initial is ambiguous in the absence of a satem-form.²³

On the other hand, the labiovelars are well attested. IE *k^w* is clear for A *štwar*, B *štwer* 'four'; for A *ašam*, B *éšane* dual beside sing. A *ak*, B *ek* 'eye'; and for B *piš* 'five' (with loss of nasal as opposed to A *pāñ*²⁴). IE *g^w* is surely represented in A *šām*, B *šno* 'wife' (Gk. γυνή, Boeot. βαγά, etc.), and probably also in A *šo-*, B *šau-*, *šaw-* and *šai-*, *šay-* 'live' (: Gk. ζῶω, Lat. *vīvo*, Skt. *jīvate* etc.).²⁵ Likewise IE *g^wh-* is quite probable for A *šärme* if the meaning, which is not sure, allows connection with Skt. *gharma-*, Gk. θερμός, etc.²⁶

The form of the initial of the word for 'ten', A *šāk*, B *šak*, has caused some confusion. The explanation is obviously assimilation, e.g. PIE **dekṃ* > PToch. **tek-*, then by assimilation of first to second consonant, **kek-*, whence by palatalization **šek-*.²⁷ Thus the chief support of the view that IE dentals may give Toch. *š* directly is done away with.

In a number of forms, however, A *š* is actually of dental origin, but only as a 'secondary' development of more original *ts* or perhaps of *c*. Most important here, as a category, are the verbal forms which show parallel stems in *ts* and *š*, e.g. A *tsār-*, B *tsār-*, *tsar-* 'divide' (Gk. δέρω etc., cf. above), beside caus. pret. act. sg. 2 A *šāsrāst*, derivative substantive *šral* 'separation'; A *tsuk-*, B *tsauk-* 'drink', pret. act. sg. 3 A *šuk*; A *tsälp-*, B *tsälp-*, *tsalp-* 'go across, be saved', pres. mid. sg. 3 A *šalpatār*, inf. *šalpatsi* etc.; A *tsām-*, B *tsām-*, *tsam-* 'grow', pres. mid. pl. 3 A *šamantār*; A *tsip-*, B *tsip-*, *tsep-* 'dance', imperf. act. pl. 3 A *šepār*; A *tsärt-* 'weep', pres. mid. sg. 3 A *šercār*, pres. mid. pple. *šertmām*; A *tspänk-* (meaning?), caus. pret. pple. *šāspänku*. This is obviously a secondary change which must have arisen properly in certain forms and was then extended to whole categories. The resulting alternation *ts/š* is partially parallel to *k/š* in verbal roots having an original guttural, but here the change extends to B also (e.g. A *kām-*, *kum-*, B *kām-*, *kam-* 'come', subj. stem A *šm-*, B *šem-*; A, B *kärs-* 'know', pret. stem A *šärs-*, B *šärs-* etc.), and is not found in present stems as is the case with *ts-/š-* (cf. above A *šalpatār* etc. from *tsälp-*, or *šercār* from *tsärt-*).

Outside of these verb forms, the change of *ts* to *š* is observed also in *ašši* (emphatic particle), no doubt an extended form of *ats* (= Skt. *eva*), and in *pākraši* 'apparently' beside B *apākärtse* (to A *pākär*, B *pākri* 'indeed').²⁸ Likewise, if the gen. ending *-nts* in B lies behind the obl. pl. *-s* in A, then the extended genitive *-šši* in A may be considered to show more original *ts* palatalized secondarily to *š*.²⁹

In the inflection of one noun and two adjectives with stems in *-t-*, we find after a nasal an alternation of *š* with *c* instead of the normal *ts*, e.g. A, B obl. *lānt* 'king' (nom. A *wāl*, B *walo*, *wlo*), nom. pl. A *lāñš* but B *lāñc*, obl. pl. A

²² Cf. WP 1.587; Sturtevant, Indo-Hittite Laryngeals 86.

²³ WP 1.571.

²⁴ Cf. Pedersen, Toch. 91.

²⁵ For the phonology, cf. LANG. 14.26.

²⁶ Cf. Schwentner, KZ 64.266; SSS 4.

²⁷ Pedersen, Toch. 252.

²⁸ Ibid. 237 f.

²⁹ Ibid. 79 ff., 237.

lāñcās etc., beside nom. sg. fem. *lānts* 'queen' (etc. with *ts*). In the inflection of the two adjective stems *pont-* 'all, each' (nom. sg. masc. and fem. *puk*) and *krant-* (nom. sg. masc. *kāsu*) 'good', we have the parallel forms nom. pl. masc. *poñś*, *kramś*, beside obl. pl. masc. *poñcās*, *krañcās* (nom. and obl. pl. fem. *pont*, *krant*) etc.

Yet a third origin of *ś* lies in original *st-* (normally B *st-*, but A *št-*). This is clear from examples like A *šreñ* (nom. pl.), B *širim*, *šcirim* (obl. pl.) 'stars' (: Gk. ἀ-στῆρ, Goth. *stairnō* etc.). That this is likewise of secondary origin is clear from the alternate B form with *śc*, e.g. *st* > *sc* > *śc*, whence always simplification to *ś* in A but only partially in B.³⁰ Another example is A *šmoñña*, B *šmoñña*, *šmoñña* 'place', obviously related to A *štām-*, B *stam-* 'stand, stay' (IE **st(h)ā-*), of which the preterit stem likewise has *ś* in A (e.g. 3 sg. *šām*), with the alternation *št/ś* just like *ts/ś* and *k/ś* (above). Further we have A *kaśši* 'hungry' beside *kašt* 'hunger' (: Hitt. acc. *kastan*), A *krośšune*, B *krośšaññe*, *krostaññe* 'cold' (subst.) beside A *k*raś*, *krośś-*, B *krośce* 'cold' (adj.).³¹

4. Examples of the change of original *s* to *ś* are plentiful. Certain etymologies are beyond question—thus the etymology of A *šāk*, B *škas* 'six' (: Lat. *sex* etc.), or of A *špāt* (in cpds. *šäpta*), B *šukt* 'seven' (: Lat. *septem*), or even of A *šom* obl. to *sas* 'one', B *šeme* 'id.' (: Gk. εἷς, ἕν etc.), and of A *šälyp* 'fat, oil' : Skt. *sarpis-*, Gk. ἔλπος (Hesych.), etc. The change occurs likewise before *w* in A *špām*, inflected stem *šäpn-*, B *špäne*, *špane* 'sleep' (: Skt. *svapnas*, OE *swefn*, etc.), and possibly in A *šar*, B *šer* 'sister' (: Skt. *svasar-*, Goth. *swistar*) if from PToch. **šäsar* with syncope. Likewise an intervening *p* does not seem to affect the change, according to the evidence of A. *špin-ac* (dat.) 'peg, hook' : Lat. *spīna*,³² and Fraenkel³³ has already compared the bird name A *špār-āñ* with Goth. *sparwa* etc. 'sparrow', Gk. σπαράσιον (Hesych.).

Of an alternation *s-/š-* in the verb, comparable to the alternations *k/ś*, *t/c* etc. (cf. above), I find only one example: A *špärk-* 'disappear', causative 'destroy', pret. pple. *šaspärku*, vbl. sb. *špärkaslune* (but preterite mid. 3 pl. *saspärkāt* with *s*, cf. SSS 371, 481).³⁴

Quite different from these changes of *s* to *ś* is that of *st* to *št* in A as opposed to B, e.g. A *štām-*, *štām-*, B *stam-* 'stand, stay' (IE **st(h)ā-*); A *štām*, B *stām* 'tree' (cf. OHG *stam* 'stem' etc.); A *wašt*, B *ost* 'house' (Gk. ἄστυ, Skt. *vastu*) etc. On the mutation of *st* to *ś*, cf. above.

5. A few examples of *ñ* with clear-cut etymology will suffice. A *ñom*, B *ñem* 'name'; A, B *ñu* 'nine'; A *mañ* 'moon, month', B *meñe* 'month' (*mem* 'moon'). A *pāñ* 'five' < **pañś* (IE **peṅkʷe*) has retained the palatal after the simplification

³⁰ Ibid. 242.

³¹ Possibly, in spite of unexplained vocalism (A *o* usually equals B *au* representing an IE *u*-diphthong), from **krus-t-* : Gk. κρύος 'frost', κρυσταίνω 'freeze', Lat. *crusta* 'rind, crust' etc. (WP 1.479 f.).

³² Schwentner, IF 55.297.

³³ IF 50.229.

³⁴ I am not clear on the corresponding B forms. SSS 480 says merely 'Ebenso B' without citation, Lévi, Frag. 147, gives only the causative stem *šparkš-* 'détruire' without citing any forms.

of the final consonant group. In B *piš* we see the loss of the nasal as in *mīsa* 'flesh' (IE **mēmso-*, Goth. *mīmz*, Skt. *māmsa-* etc.); see below. Whether by analogical extension or by correct development, the alternation *n/ñ* is likewise found in the verb, e.g. A *nāk-* 'disappear', (caus.) pret. stem *ñak-* (SSS 445), *nu* 'roar', pret. *ñañwār* (SSS 446) etc. Here also a following *w* does not seem to prevent the change of *n* to *ñ*, cf. A (pres.) *pāñwās* 'pulls', but strangely enough the pret. stem appears with *n* in *panwar* (3 pl.), *pānwō* (pple.) etc. (SSS 448). B shows assimilation of *w* and loss of palatalization, *pānn-* or *pann-* (see below).

6. The etymological interpretation of words showing initial *ly-* is for the most part difficult. Some possible connections with Indo-European groups are, however, to be mentioned: A *lyāk*, pl. *lyši*, B *lyak*, pl. *lyši* 'thief' (Boh. *lakditi* 'ambush', OHG *luog* 'lair'³⁵); A *lyām* 'sea' (Lett. *lāma* 'puddle, low spot in a field', Lat. *lāma* 'bog, swamp'³⁶); A *lyāk* 'visible' (with derivative abstract *lyāktšune*) is probably related to the verbal root *lāk-* 'see' (: OE *lōcian* 'look' etc.³⁷); A *lykāly*, *lyākly*, B *lykaške* 'fine', possibly, with diminutive suffix from the base *leg^wh-* (Gk. *ἐλαχός* etc.); A *lymeṃ* (dual) 'lips', possibly from the same base as Skt. *lambate* 'hangs down' etc.³⁸ (for the loss of stop after *m*, cf. A *kam*, B *keme* 'tooth' : Skt. *jambha-*); A *lyūtār*, *ly^wtār*, *lytār* 'exceedingly' (: OCS *ljutŭ* 'fearful', Gk. *λύσσα* 'rage'?, cf. English *awfully*). And there are still other examples of *ly-* for which even less probable etymologies might be proposed.

The expected alternation of *l/ly* occurs also in the verb, e.g. A *lāk-* (pres. act. sg. *lkām*, *lkāt*, *lkāš* etc.) 'see', imperf. act. sg. 3 *lyāk*, pl. 3 *lyākar*; A *lānk-* 'hang' (pres. act. pl. 3 *lānkiñc*), caus. pret. pple. *lyalyānku*; A *lip-* 'be left', caus. pret. act. sg. 3 *lyepās*; cf. also A *lyipār*, B *lyipar* 'remainder'; A *lu-*, *law-* 'send', pret. A *lywā*, B *lyuwa* (SSS 366).

It is worth noting also that palatalization of *l* is not prevented by intervening *w* or labials, e.g. A *malywāt* 'you crush' (2 sg.), cf. Goth. *gamalwjan* 'id.' but B *melyeṃ* 'they crush' (Lévi, Frag. 129) with loss of *w* (see below), A *kālyme*, B *kālymye* (-*iye*) 'direction', and A *šālyp*, B *šalype* 'oil, fat' (: Skt. *sarpis-* etc.).³⁹

7. More difficult is the question of mutation in the case of the labials. But it seems probable that these too were subject at one time to similar changes of articulation, though the evidence is left only in isolated relics, particularly in dialect B⁴⁰; e.g. of *my*, B *kālymiye*, *kālymye* 'direction' (beside A *kālyme*); of *py*, A *pyāpi*, pl. *pyāplāñ*, adj. *pyāpyāši*, B *pyāpyo* 'flower', which could conceivably be related to Lett. *pāpa*, *pāpis*, *pāpulis* 'pimple', Lith. *pāpas* 'dug', *pupuolo* 'bud' etc., but the vocalism of the group⁴¹ is too fickle to be helpful in the matter of palatalization. Likewise little can be concluded from a comparison of A *pyākāš* (dat. *pyākšac* etc.) 'sacrificial post' with Gk. *πῆγνυμι*, *πῆσσω* 'make fast', Lat. *pangō* etc., though the etymology seems probable enough. Further evi-

³⁵ WP 2.377-8.

³⁶ Ibid. 2.385.

³⁷ Ibid. 2.381.

³⁸ Ibid. 2.432-3.

³⁹ Cf. Pedersen, Toch. 241.

⁴⁰ Ibid. 241 f.

⁴¹ WP 2.107.

dence for the regular mutation of the labials is found also in B *piš* 'five', *mīsa* 'flesh', *mit* 'honey', from IE **peṅkʷe*, **mēmso-*, **medhu-*. The following *ē* palatalized the preceding *p* or *m*, under the influence of which, in turn, the *ē* became *i*; and in *piš* and *mīsa* the nasal was lost before the sibilant.

As regards the palatalization of initial labials, expected in certain verbal forms, Schulze has already pointed out how such a causative preterit form as B *spyārta* shows palatalization in contrast to the reduplicated A *saspärtu* (root B *spärt-*, A *spartw-* 'turn' intrans.) just as roots in *t*, *k* or *l* show the palatalized initial *c*, *ś* and *ly*, e.g. B *cāla*, *śārsa*, (mid.) *lyāmate* beside the likewise palatalized (and reduplicated) A *cacāl*, *śaśārs*, *lyalyām*.⁴² A parallel form is B *pyautka* beside A *papyutāk* from A *pyut-k-* 'zu Stande kommen',⁴³ for here the palatalization of the root has no 'functional' value (i.e. it occurs in all forms of the verb, e.g. pres. ind. act. *pyutkāš*, subj. mid. *pyutkāsmār* etc.), nor has it any such value in A *pyāštāš* (= Skt. *chadayati*), caus. pres. act. sg. 3 to pres. mid. *pyāštātār*. Also *m* shows parallel palatalization to *my* in B *myāska* 'changed' (no A equivalent?). Of course, the originality of such palatalization depends upon the cause and original scope of the phenomenon in the verb system.

Palatalization of stem-final *m* or *p* is also to be observed in some preterit forms in dialect B, e.g. *śānmyāre* 'they proclaimed',⁴⁴ *cāmpyāre* 'they were able'⁴⁵ etc.

8. The question of the palatalization of *w* is even more complex. It has long been recognized that Toch. A *w* (= IE *w*) might correspond to *y* in dialect B in many instances, especially in initial position. Examples where the etymology is clear are A *want*, B *yente* 'wind' (Lat. *ventus* etc.), A *wās-*, B *yās-* 'dress' (Goth. *wasjan* etc.), and (with later loss of *y* before *i* in B) A *wiki*, B *ikām* 'twenty'. Equally clear-cut examples of the correspondence, but where the etymology is doubtful or obscure, are A *wše* 'night', *wšeññe* 'couch', B *yaši* 'night' (Skt. *vāsati* 'dwells?'); A *wārkānt* 'wheel', B *yerkwantai* (obl.) 'wheel' (: Skt. *vr̥ṇākti* 'turns' etc., IE **werg-*?⁴⁶); A *wās* 'gold', *waši*, B *ysašše* 'of gold' (possibly : Lat. *aurum* etc.⁴⁷); A *wkāṃ* (inflected stem *wākn-*), B *yākne*, *ykne* 'manner, way'; A *wāltš*, B *yāltse* '1000' (perhaps, in spite of the absence of dental suffixes, : Slav. *vel-* prefix 'very', *velikū* etc. 'great'⁴⁸).

That this change might be considered a sort of 'palatalization' comparable to the other phenomena which we have been discussing seems to have been recognized first by Schulze in his article on the reduplicated preterit, which has already been mentioned.⁴⁹ Schulze's conclusion arose from his recognition of such preterit forms as B *yaika* beside A *wawik* 'destroyed', and B *yātka* beside A *wotāk* (**wa-wtāk*) 'command', as parallel to B *spyārta* : A *saspärtu*; B *pyautka* : A *papyutāk*; B *cāla* : A *cacāl*; B *śārsa* : A *śaśārs* etc. (cf. above), where palatalization has become a sign of function whatever its origin or original scope may have been.

⁴² Kl. Schr. 243 ff.; SSS 371, ftn. 1; Pedersen 187.

⁴³ SSS 452: 'Ebenso B', but without citing root or forms.

⁴⁴ Pedersen, Toch. 180 f., 242; MSL 18.2.

⁴⁵ Lévi, Frag. 114.

⁴⁶ WP 1.271 f.

⁴⁷ WH 1.96.

⁴⁸ WP 1.295 f.

⁴⁹ Kl. Schr. 245.

Still other examples of this palatalization of *w* to *y* in B may be cited, e.g. *yairu* pret. pple. to *war-* 'exercise'; *yaitkormem* 'according to the order', probably with *yātka* (above) to *wātka-* 'command'. Likewise *yārpo* 'punya' is probably to be connected with *wārp-* (3 sg. pres. mid. *wārpñātr*) 'enjoy, experience'.⁵⁰

As has been already noted by Schulze,⁵¹ the later loss of *y* before *i* explains the contrast between A *wiki* and B *ikām* 'twenty'. Likewise the loss of *w* after *ṣ* in A *ṣpām* (in cpds. *ṣāpna-*), B *ṣpāne* 'sleep' (OE *swefn*, Skt. *svapnas*) and in A *ṣar*, B *ṣer* 'sister' (Goth. *swistar*, Skt. *svasar-*) seems more easily explained by way of *ṣy-*. There is evidence that *sw-* was maintained when not palatalized, cf. A *swase*, B *swese* 'rain' (Gk. *ῥεῖ* 'rains' etc.⁵²), and furthermore the initial cluster *ṣw* does not to my knowledge occur. On the other hand we find *ṣyak* 'together' and *ṣya-wkām* 'in the same way', with *ṣy-* retained, but the forms are etymologically obscure.

In the light of what has been concluded, I believe another explanation may now be offered for such a form as B *mely-* 'crush' beside A *malyw-*, e.g. IE **molwy-e/o-* > PToch. [mel'w'-], whence B [mel'-], but A, with loss of *w*-palatalization later, [mal'w-]. We are not dealing simply with a loss of *w* in B but with the loss of *w'*. The relation between A *pānw-* or *pañw-* 'pull' and B *pānn-*, *pann-* is apparently of a different sort.

⁵⁰ Lévi, Frag. 154.

⁵¹ L.c.

⁵² Meillet, JAs. 1.115 f. (1912); WP 2.468.

THE PITCH PHONEMES OF ENGLISH

RULON S. WELLS

UNIVERSITY OF PENNSYLVANIA

[A system of four pitch phonemes enables us to differentiate all the phonemically (i.e. perceptually and meaningfully) different pitch contours of English that have come to the writer's notice. If new contours should come to light, they could probably be treated without the introduction of any additional pitch phonemes. The system applies to the problem of English pitches the methods already applied to segmental phonemes as well as to stresses and junctures.]

1. Orientation. Ordinary phonemics adheres, with a few exceptions, to the segmental principle.¹ This principle may be thus formulated: all the utterances of a dialect can be divided into segments ('phones') such that (1) each segment is continuous; (2) each segment belongs to just one phoneme; (3) only segments belong to phonemes; (4) the segments are as short as a phonemic analysis warrants. The principle of phonetic similarity is likewise respected: (1) if a phone A belongs to a phoneme, any phone B indistinguishable therefrom belongs to the same phoneme, whether B occurs in the same environment as A or another environment; (2) allophones which are in complementary distribution belong to the same phoneme if and only if they are phonetically similar to one another, and are more similar to each other than to allophones of any other phonemes. The first half of this principle forbids overlapping, even partial overlapping;² the second half makes complementation a necessary but not a sufficient ground for uniting allophones into one phoneme. Mere reliance upon the demand for contrasts (non-complementary distribution) and bi-uniqueness³ does not yield a methodical and determinate analysis of any given language.⁴

Some of the frequently admitted exceptions to the segmental principle are as follows: (1) The extraction of a nasalizing phoneme in languages such as Bengali and Hindustani, which have certain vowel qualities existing both nasalized and unnasalized, where the nasalizing makes a phonemic difference. (2) Extraction of a length phoneme in languages with significant length, and of a syllabifying phoneme where semivowels and continuants function as syllabics. Whether

¹ Zellig S. Harris and Henry M. Hoenigswald, by their suggestions and questions, have greatly helped to improve the adequacy of this system. It was outlined in a paper read before the Linguistic Society in New York in December 1944. The following books and papers are cited by authors' names only:

Bernard BLOCH and George L. TRAGER, *Outline of Linguistic Analysis*, 1942.

G. L. TRAGER and Bernard BLOCH, *The Syllabic Phonemes of English*, *LANG.* 17.223-46 (1941).

Leonard BLOOMFIELD, *Language*, 1933.

Charles F. HOCKETT, *A System of Descriptive Phonology*, *LANG.* 18.3-21 (1942).

George L. TRAGER, *The Theory of Accentual Systems*, *LCP* 131-45 (1941).

² Bernard Bloch, *Phonemic Overlapping*, *American Speech* 16.278-84 (1941).

³ Yuen Ren Chao, *Non-Uniqueness of Phonemic Solutions of Phonetic Systems*, *Bull. of the Inst. of Hist. and Philology (Acad. Sinica)* 4.363-98 (1934).

⁴ Hockett 9; Morris Swadesh, *The Phonemic Interpretation of Long Consonants*, *LANG.* 13.1-10 (1937). See especially the first page of Swadesh's article.

such phonemes are to be extracted is determined by distributional more than by phonetic facts; but the extraction is always possible.

Another exception to the segmental principle is (3) necessary in dealing with languages which have significant features called 'prosodic'⁵ or 'suprasegmental'⁶—for instance pitch, stress, and juncture in English. To avoid this third exception is for many languages not feasible. Certain pitches and stresses in English are unquestionably phonemic; yet they occur not by themselves but simultaneously with vowel and consonant qualities; physically and acoustically, they are not parts of phones but features or qualities of phones. In this sense they are suprasegmental; but no phonemist would dream of regarding two English phones with the same vowel quality but significantly different pitches as belonging to different vowel phonemes; rather, they would be assigned to the same vowel phoneme but to different pitch phonemes.⁷

This paper studies the pitch phonemes of American English. Stress and juncture, the other two features usually regarded as suprasegmental,⁸ have been analyzed by the same phonemic methods that are applied to vowels and consonants; but the systems hitherto published (Palmer, Bloomfield, Bloch and Trager, Harris) have denied a like treatment to pitches. Instead, whole pitch patterns have been analyzed as single phonemes. This paper tries to apply to pitches, *mutatis mutandis*, all the principles and methods of segmental phonemics. There is interest in seeing what the *mutanda* are; and there is interest also in deciding between conceivable alternative analyses. Some *prima facie* plausible analyses turn out to be mere tricks whose advantages are only apparent.

2. Meaning of 'Suprasegmental'. In effect, the term 'suprasegmental' phoneme' as used in recent discussions¹⁰ simply denotes phonemes which are neither vowels nor consonants.¹¹ The term SS has also been used in several other senses:

PHONETIC. Let us suppose that, by some stated procedure, an utterance has been divided into pieces which we may call segments; each segment has, during all or part of its duration, various qualities or features. Now let each segment be of such length that it is a phone, i.e. a member of a segmental phoneme.

⁵ Trager 132, paragraph 4.

⁶ Hockett §5.31.

⁷ The fact that vowels and consonants, as well as pitches and stresses, are abstracted features rather than segments does not require us, with Hockett (8), to regard phonemes as classes of classes of features, or even as classes of features, instead of as classes of segments. One segment can be assigned to two phonemes at once, provided the two phonemes are of different dimensions. Suppose that there are just two pitches, P and Q, and just two vowel or consonant qualities, A and E. Then as primary classes there will be AP (segments with the quality A and the pitch P) AQ, EP, and EQ. The phoneme A = AP + AQ = A(P + Q), since P + Q is the total class of pitches; likewise the pitch phoneme P = AP + EP = P(A + E), since A + E is the total class of qualities.

⁸ Hockett 9, §6; Bloch and Trager 34; Trager and Bloch §2.

⁹ Hereinafter abbreviated SS.

¹⁰ Trager 131 (par. 5), 132 (par. 4); Bloch and Trager, implied 39 (par. 2), 41, 47-52.

¹¹ It is chiefly in this negative sense that juncture phonemes (Bloch and Trager 41; Hockett §6, §§7.74 ff.) are to be regarded as SS, though Bloch and Trager (34-6) regard the members of juncture phonemes as phonetically SS in some sense.

Then a feature is called SS if it is contained without interruption in two or more successive segments,¹² whether it be automatically conditioned or phonemically significant.

PHONETIC-PHONEMIC. A feature is called SS if every segment or sequence of segments having it is assigned to a certain phoneme, but if it occurs simultaneously with other features such that every segment possessing them belongs to some other phoneme. The feature in question may or may not be SS in the purely phonetic sense. For example, if every vowel quality occurs both with and without nasal resonance (as in Bengali, etc.), and if the difference is phonemic, we may extract a phoneme of nasal resonance. Then one segment may belong to two phonemes: by virtue of its vocalic features it belongs to a vowel phoneme, by virtue of its nasalization it belongs to the nasal phoneme.¹³

PHONEMIC. A phoneme is called SS if the feature which determines the assignment of segments or sequences to that phoneme is always or sometimes SS in the phonetic sense—e.g. ancient Greek rough and smooth breathing as analyzed by Trager,¹⁴ the English stress phonemes, and (as we shall argue) pitch; or if the feature is SS not in the phonetic but in the phonetic-phonemic sense—e.g. the Bengali nasal phoneme; or third, if it does not affect patterning of segmental phonemes. Where P and Q are any two segmental phonemes and R is another phoneme, the statement that R is SS means that in whatever environment PRQ occurs, PQ also occurs.

GRAMMATICAL. The phonemes belonging to a certain set (e.g. stresses; pitches or pitch-contours) are called SS if, whatever their phonetic character, they behave grammatically like a separate system. For instance, in English the pitch and stress phonemes do not mix with segmental phonemes to form morphemes; each set forms morphemes separately; yet every complete utterance must contain at least one segmental morpheme (i.e. a morpheme composed wholly of segmental phonemes) and at least two SS morphemes: one pitch morpheme and one stress morpheme.¹⁵ This is one of Bloomfield's¹⁶ grounds for regarding pitch and stress phonemes as 'secondary'.

Since the grammatical differences between English pitch and stress on the one hand and segmental morphemes on the other are tied up with differences in the kinds of meanings which they respectively convey, the problem here arises¹⁷ of drawing the line between linguistic meanings and cultural or conventional (non-linguistic) meanings.

There are in English (as in many other languages) various features, other than those characterizing vowels and consonants, which serve to convey standardized meanings. All of these features are, presumably, organizable into phonemes, provided only that their meanings and the modes in which the features convey the meanings are such that we are willing to regard the features as falling within

¹² Hockett §§5.31-2.

¹³ Cf. Trager 135 (par. 2).

¹⁴ Reported by Hockett §7.61.

¹⁵ The argument in favor of regarding pitch contours as morphemes is given below in Part 4.

¹⁶ 116; cf. 163.

¹⁷ Bloomfield 114 (par. 2).

the province of linguistics. All such phonemes would be SS not only in the strictly phonemic sense, but no doubt in the grammatical sense as well. A list of the more obvious features of this kind, apart from pitch and stress, might include timbre, rate of speed, and style. They are mentioned only to clarify the meaning of the term SS; they will not be dealt with here. For stress and juncture, Bloch and Trager's system¹⁸ is accepted as correct.

3. The System. As in segmental phonemics, pitch contours admit of alternative phonemic analyses. This is due not to a lack of principles, but to ignorance of how to apply them. Specifically, we try to choose the simplest system, but we have no criteria which are applicable in difficult cases.¹⁹ We shall first outline the system which seems to us the most faithful to the purpose of phonemics, and then delineate the two or three alternatives which have been previously suggested.

In the first place, we observe the principle of segmentation: the pitch contour of an utterance is not treated as a continuum, nor as an atom; it is broken up into segments. Phonetically, a pitch segment is rarely if ever homogeneous, i.e. constant throughout its length. But in the sequence of pitches, certain ones are key pitches; the others may be regarded as functions of these. Each utterance is divided into segments in such a way that every segment contains a key pitch at the beginning, and no other. Often the duration of the key pitch is very short compared with the length of its segment; many features of pitch contour are automatically conditioned.

The distinctive feature of the segments assigned to the pitch phonemes is pitch relative to the speaking-range of the speaker's voice. There are four pitch phonemes, designated by Arabic numerals from 1 (lowest) to 4 (highest). Thus, the phonemic pitch contour of the sentence *The telephone's ringing!* would be rendered as follows: ²*The* ³*telephone's ringing!* This means that pitch phoneme 2 is initial; pitch phoneme 3 begins at about the beginning of *telephone*; pitch phoneme 2 begins again after the first syllable of *telephone*. All the rest of the utterance belongs, phonemically, to pitch phoneme 2.

For simplicity's sake, the examples in this paper are not written in a phonemic transcription except for the pitch phonemes. As a further aid to easy comprehension, the standard English punctuation signs are used. Furthermore, we take advantage of the standard orthographic division into syllables, and write our pitch symbols at the beginning of the orthographic syllables to which they apply. This is done merely for the reader's convenience. The system does not presuppose the existence of phonetic syllables, nor even of syllabics. (The reason will become clearer as more examples are presented.) Phonetically, the significant pitches may or may not exactly coincide with vowels; but we may assume that phonemically they do, for there is no contrast between a pitch beginning on a vowel and one beginning on a consonant between that vowel and the following vowel. (We assume that Bloomfield's syllabifier phoneme [see his *Language*

¹⁸ Trager; Trager and Bloch; Bloch and Trager.

¹⁹ Mere number of phonemes, as proposed by Hockett §6.12, is not always an acceptable measure of simplicity, nor is simplicity always a last resort as a criterion. Often economy and pattern (distribution) favor different analyses.

92, 120-3] is phonemically a vowel, i.e. virtually equivalent to Bloch and Trager's /ə/.)

Considered phonetically in relation to the segmental phonemes, the length of a pitch phoneme is variable. It can coincide in time with any number of segmental phonemes. Its effect will continue until replaced by another pitch phoneme, or until the end of the utterance. A corollary of this statement is that a pitch phoneme cannot immediately follow itself. For instance, 22 would be merely a notational lapse for 2.

THE SPECIFIC PITCH CONTOURS OF ENGLISH

Some of the most common contours are herewith exemplified. Minimal contrast between pitch phonemes 1 and 2 is seen by comparing Nos. 14 and 19; between 1 and 3 by comparing Nos. 1 and 2; between 1 and 4 by comparing Nos. 24 and 25; between 2 and 3 by comparing Nos. 11 and 26; between 2 and 4 by comparing Nos. 18 and 24; between 3 and 4 by comparing Nos. 24 and 27.

1. ²Are you ³positive? (also: ²Are you ⁴positive?)
2. ²I brought it ³home ¹with me.
3. ²Who ³did ¹it?
4. ²He doesn't lend his books to ³an¹ybody.
5. ²He doesn't ¹lend ¹his books to [just] ³an²ybody.
6. ²If ³you ²go, then I'll go ³with ¹you.
7. ²Naught²y, ⁴naught²y! (monitory, to children)
8. ²I'll ³be ⁴an³gry! (monitory, to children)
9. ²I'm ⁴sure ¹I brought it home.
10. ²Take ⁴me ¹there!
11. ²The ⁴tel²ephone's ringing!
12. ²Where were ⁴you ²last night, my ³friend?
13. ²I was talking a⁴bout ²him, not ³with ¹him.
14. ³I ¹did it.
15. ³That's ¹not ²funny [—that's ³¹mean.]
16. ³At⁴ta²boy! (expression of encouragement)
17. ³I ²didn't do it [I don't know who did].
18. [²Go ahead and ³do ¹it—] ³I ²don't mind.
19. ³I ²didn't ask you, did I?
20. ³Talk²ing! (on the telephone, to identify oneself as the person asked for)
21. ³Well, ²well, ¹well! (sarcastic, etc.)
22. ³My ²good¹ness!
23. ³Oh ²my ³good¹ness!
24. ³Give ⁴him the money?! [²I should ⁴say ¹not.]
25. [You've charged me fifty cents extra—] ³how ⁴come?
26. ³How did it ⁴hap²pen?
27. ⁴Who did you say did it? (great surprise)
28. ⁴Go²ing! [²Why, you've just ³¹come.]
29. ⁴Yoo-²hoo! (woman's call to hail a person)

These examples illustrate nineteen different pitch contours:

23 (No. 1)	31 (No. 14)
231 (Nos. 2, 3, 4)	312 (Nos. 15, 16)
23132 (No. 5)	32 (Nos. 17, 18, 19, 20)
23231 (No. 6)	321 (Nos. 21, 22)
2343 (Nos. 7, 8)	3231 (No. 23)
241 (Nos. 9, 10)	34 (No. 24)
242 (No. 11)	341 (No. 25)
2423 (No. 12)	342 (No. 26)
24231 (No. 13)	4 (No. 27)
	42 (Nos. 28, 29)

It must be borne in mind that a contour like 231 contrasts minimally with 23, if the spacing of the phonemically identical segments (i.e. here 2 and 3) is the same. This is because iteration of pitch phonemes does not occur in this system; 231 contrasts with what would be 233 if such a contour could occur. Thus the contrast between 1 and 3 is as well exemplified by 23 and 231 as by 23 and 21.

In proving the existence and distinctness of the four pitch phonemes by minimal contrasts, we ought to consider the same string of segmental phonemes with minimally contrasting pitch contours imposed on it; but it is difficult to find one such string equally well adapted to two minimally contrasting contours. In most of the examples, therefore, the contrast is minimal only so far as the contours are concerned.

Under circumstances to be stated below (Semantic Values), a single vowel may be affected by two pitch phonemes, but never by more than two. Each of the above examples consists of what would be called, on the basis of the structure of its segmental morphemes, a single clause. One of them contains a single pitch phoneme; most of them contain two or three. These contours may be called the simple pitch contours. One such simple pitch contour may be followed in the same utterance by one or more others; the result may be called a compound pitch contour. The basis of this classification is not intrinsic; it is not the contours themselves, but their correlation with sequences of segmental morphemes. If we were to define a simple contour as a contour of which no part (initial, middle, or final) ever characterizes an independent utterance, this definition would exclude certain contours, such as 231, which we wish to include. Moreover, this definition would give us no criteria; it would not always enable us to break up a given compound contour in a unique manner into its immediate constituents—two or more simple contours—just by considering the pitch phonemes alone; we should have to take into account stress and juncture phonemes and morphemes also, and sometimes syntactical structure as well. Besides compound contours, there also occur what we may call intrusive contours. Such are modifications due to emphasis and the contours characterizing parenthetical phrases.

In the discussion of distributions and allophones, only the simple contours need be taken into account.

DISTRIBUTION

As was noted above, each pitch contour can be separated into two components: the bare sequential order of pitch phonemes, and their spacing with respect to segmental phonemes. The same could be said of segmental phonemes with respect to each other; compare the usual statements about consonants with respect to vowels in Semitic languages. The reason is grammatical (and semantic) only; just as consonants and vowels form separate morphological systems in Semitic, so segmental phonemes and pitch phonemes form separate morphological and syntactical (and semantic) systems in English. That is, a sequence of segmental morphemes and a sequence of pitch morphemes are partially independent: the segmental sequence may be accompanied by any one of a number of pitch sequences, and each pitch sequence may accompany an indefinitely large number of segmental sequences. When only the order of pitch phonemes is specified, all we know about the spacing is that the first vowel is accompanied by the first-mentioned pitch phoneme. In discussing distribution of pitch phonemes, it is sufficient to consider their selection and order, while ignoring their spacing. Any order which occurs (e.g. 241) usually admits of an indefinite variety of spacings.

Pitch phoneme 1 does not occur initially. This is the principal limitation upon distribution. Examination of the examples shows that 2, 3 and 4 occur initially; that each pitch phoneme occurs medially, preceded by any other pitch phoneme; and each pitch phoneme occurs finally. Subordinating clauses generally end in 2, but it is a mistake to think that pitch phoneme 2 before juncture is always or even usually a sign that the utterance is unfinished. Not all possible orders occur. The list of examples is by no means complete; for instance, of the twenty-seven possible orders of three pitch phonemes PQR, where P is initial and therefore not 1, and where $Q \neq P$ and $Q \neq R$, only ten are exemplified in the list. Again only one pitch phoneme (4) is exemplified in isolation. Occurrences of the other pitch phonemes in isolation are rare, except that 2 is often used in slow and deliberate counting.

ALLOPHONES

The two main facts about allophones²⁰ are these:

1. Pitch phonemes 2, 3, and 4, when final, are subject under certain circumstances to a rise at the very end. This is clearly shown in the following example: (a) *I didn't!*—(b) [*No.*] *I didn't.* In both these, *I* belongs to pitch phoneme 2 and *did-* to 3. In (a), the *-t* is on an appreciably higher pitch than *did-*; in (b) it belongs to pitch phoneme 1. We could assign *-t* in (a) to pitch phoneme 4, in which case it would be a low allophone of 4, lower than the allophone in *'go²ing!* (Ex. 28). But Ex. 27 shows us that 4 is subject to a similar final rise, unless we wish to set up a pitch phoneme 5 just to account for this rise. The

²⁰ Allophones of pitch phonemes can, of course, differ from each other only in the one dimension or respect of pitch.

necessity is obviated by treating the pitch of *-n't* as a high allophone of 3; 2 and 4 have similar allophones.

2. Unstressed vowels sometimes have lower allophones than stressed vowels; the exact conditions of occurrence have not been investigated. Example: ³*He who* ²*hesitates is* ¹*lost*. In *hesitates*, the syllables *-si-* and *-tates* are lower-pitched than *he-*; *-tates* in addition has a very slight rise at the end, less than the rise before pause juncture.

It seems likely that besides allophony, there is considerable free variation in phonemically identical pitch contours. Such is the frequent phonetic approximation or assimilation of the actual phonetic value of one pitch phoneme to that of the following, remarked by Palmer and others.

How faithfully we have observed the principle of phonetic similarity cannot be known until the present phonemic analysis has been compared with phonetic graphs from the laboratory—a comparison which however is not necessary for establishing the validity of the phonemic analysis itself. But whether or not the second proposition of this principle (see Part 1) has been observed, we have not violated the fundamental doctrine. Within one utterance by one person, if segment A has been assigned to pitch phoneme P, then every other segment indistinguishable from A in pitch is also assigned to P.

SEMANTIC VALUES

The pitch phonemes, like segmental phonemes, do not in general have meaning by themselves. They are organized into meaningful sequences called pitch morphemes, which are the strict analogues of segmental morphemes composed of segmental phonemes. But pitch morphemes are so few in number that it seems unnecessary to regard them as in turn organized into syntactical arrays, except in the case of compound sentences. The morphemes into which pitch phonemes enter contain no other kind of phonemes. In the following attempt to state the meanings of the pitch contours or morphemes previously exemplified, no concern need be felt that the meanings given for each morpheme are not particularly unified. These meanings reduce to two main kinds: EMPHASIS and ATTITUDE. Emphasis is a modification of attitude; any attitude can be emphasized or merely expressed without emphasis.

Every utterance contains at least one main emphasized word; and within this word it is one vowel or diphthong which receives the emphasis. The emphasis is marked by maximum stress and by the pitch features which are now to be described.

Let us first consider the favorite contour.²¹ As has been remarked, this consists of an order: 231, and a spacing. Consider the following examples:

- (a) ²*Where shall we go* ^{TO}¹*DAY?*
- (b) ²*Where shall we* ³*GO* ¹*today?*
- (c) ²*Where shall* ³*WE* ¹*go today?*
- (d) ²*Where* ³*SHALL* ¹*we go today?*
- (e) ³*WHERE* ¹*shall we go today?*

²¹ Cf. Bloomfield §11.2 on favorite sentence-types.

The pitch phoneme 2, if it occurs, accompanies the first vowel; the phoneme 1 occurs immediately after 3. We could, then, take 3 as a function of 1 or vice versa. If 3 is a function of 1, we say that 3 occurs one vowel before 1, except that both 3 and 1 occur on a final stressed vowel. If 1 is a function of 3, we say that 1 occurs one vowel later than 3, with the same exception. The phoneme 2 occurs on the first vowel except when 3 occurs there, in which case 2 does not occur at all. It is slightly easier to take 2 as a function of 3 than of 1; hence 1 will also be taken as a function of 3. The position of 3 then is the independent variable, and the positions of 1 and 2 are the dependent variables.

This fact might be symbolized by writing the symbols of all the pitch phonemes before one vowel; e.g. (c') *Where shall ²³¹WE go today?* If the utterance has only one loud stress, the place of the independent pitch phoneme coincides with the place of the loud stress. In other words, the independent pitch variable is independent only in relation to the other pitch phonemes; its place is dependent on that of the loud stress (or partially dependent, if there is more than one loud stress). This is a fact of phonemic distribution.

Some utterances have more than one main emphasis; e.g.

(f) [*Oh dear,*] ²what ³²SHALL we ³¹DO?

(g) ³WHAT ²shall we ³¹DO?

We may regard the order 23231 in example (f) as a sub-type of the order 231 in examples (a) to (d), with the sequence 232 replacing the phoneme 2. This pitch rise is not an inevitable result of the extra stress; the extra stress could occur without the pitch modification.

Elaborate discussion of the semantics of pitch phonemes (qua morphemes or constituents of morphemes) is outside the scope of this paper. It will suffice to note that pitch phoneme 4 is a morpheme in itself, with the meaning 'surprise'. As the final pitch phoneme in a sequence, it indicates surprised questioning; when followed by 1, it indicates a surprised assertion.

4. Some Possible Alternative Systems. The system which has been presented has retained as many as possible of those principles which govern standard segmental phonemics. The systems now to be described desert one or another of these principles.

BLOOMFIELD'S SYSTEM

Bloomfield (92) lists five pitch phonemes: / . ˩ ? ! ,/. These, together with the stress phonemes and the syllabifier, he terms 'secondary phonemes'. Each of these pitch phonemes characterizes a sentence as a whole, and a single utterance often contains just one of them. As his example /¹sevn o ¹¹klak?!/ (92) shows, the phoneme /!/ may occur simultaneously with one of the others.

Whether or not these phonemes will account for all the contrasting pitch contours, they do contrast with each other: translated into the present system, /./ usually equals 231; /˩/ usually equals 32 or 342; /?/ usually equals 23; /!/ signifies the presence of 4 somewhere in the pattern; and /,/ usually equals 232. But in setting up these phonemes, the principle of segmentation has been abandoned. The segments are not as short as they could be; it is as if we showed

/kæ/ and /æk/ in a minimal contrast, ignoring the fact that they are themselves composed of the same parts in two different orders.

It will be noticed that the pitch morphemes are not always used in an economical way in English; very often they are mere auxiliaries. (Or, if we prefer to express it so, segmental morphemes and grammatical arrays of such morphemes are often merely auxiliary to pitch morphemes.) Thus the use of the auxiliary verb *do* without any special pitch morpheme would sufficiently indicate that *Do you have a cold* is a question, in contrast with the statement *You have a cold*; or the use of the pitch morpheme without the use of *do* would equally well signalize the question. A third way of expressing the difference would be by word order alone: by the difference between *You have a cold* and *Have you a cold*. Thus a difference which is expressible lexically (e.g. by the presence or absence of *do* or of a pitch morpheme) is also expressible syntactically. This may have lent plausibility to the view that pitch phonemes are not morphemic (lexical) but grammatical (in particular, syntactical). But as the case of *do* shows, the fact that a meaning is expressible grammatically does not imply that whatever expresses that meaning must be grammatical itself.

There is, then, no reason why pitch morphemes should not be treated as composed of pitch phonemes, just as other morphemes are composed of segmental phonemes. It is true that pitch morphemes are fewer in number, so that it is feasible to treat them as unanalyzed units; but it is still more convenient to analyze them. A further point is that if any new distinctive²² pitch contours should be discovered, Bloomfield's method could deal with them only by admitting them as absolutely new contours. Just this is done by Bloch and Trager (52); they add /.../ ('suspensive') and /i/ ('contrastive') to Bloomfield's list; the latter phoneme combines features of pitch and stress. The method of this paper, however, would probably be able to deal with any newly noticed pitch contours by analyzing them as other sequences of the same four pitch phonemes. Though it is always possible that a fifth phoneme might be required, it is much less likely. For so far as has yet been observed, many of the possible combinations of the pitch phonemes are not actually used.

PALMER'S SYSTEM

Harold E. Palmer²³ virtually sets up a system of pitch phonemes, which are intermediate in character between Bloomfield's and those of the present system. An utterance is divided into as many units as there are 'maximums of prominence' (loudest stresses). A syllable containing such a loudest stress is called a NUCLEUS; the preceding part of the unit is called the HEAD, the following part of the unit is called the TAIL. No criteria for finding the division between the tail of one unit and head of the next are stated, but they are partially implied by the automatic limitations which Palmer ascribes to tails. Tails are non-distinctive, their pitch contours being automatically determined by their respective nuclei; but the pitch patterns of heads are independently variable and distinctive. Palmer lists

²² Distinctive, and having a kind of meaning which we will agree (cf. Bloomfield 114) is not merely cultural but linguistic.

²³ English Intonation, 1922.

one set of pitch phonemes for nuclei (8),²⁴ and another set for heads (17-8). The nucleus phonemes are I falling, II high-rising, III falling-rising, and IV low-rising. Ignoring differences between British and American pitch patterns, his I usually equals 31; II usually equals 24, III usually equals 32, and IV usually equals 23. Then the head phonemes are the equivalent of groups of pitch phonemes which precede the pairs here named.

If pitches be compared to writing, we may say that what Palmer has given is a syllabary rather than an alphabet. Furthermore, tying up pitches with stresses in one system engenders not merely repetitions but difficulties (cf. his p. 69).

HARRIS'S SYSTEM

In conformity with standard phonemic methods, Z. S. Harris's system,²⁵ like ours, aims to break up pitch contours into segments just short enough to provide enough phonemes to mark the difference between the phonemically different pitch contours which actually do occur. Yet the phonemes of the two systems are quite different.

The following example shows this point. In the sentence *2Don't you 3dare do that a3gain!*, the pitch is fairly level on the first two words; then comes a bump or hump (a sharp rise and fall) on the first part of the vowel in *dare*, followed by another level stretch and by another bump on the first part of the vowel in *-gain*. Harris divides a sentence of this kind into two segments: *don't you dare* and *do that again*. The pitch of the first segment is analyzed into two phonemes. One, a 'scope' phoneme, represents the level-bump-level contour, without regard to where the bump occurs; the other represents the exact location of the bump (in this example, near the end of the first segment). The second segment is analyzed similarly. Our system of four pitch phonemes resembles Harris's system in that it distinguishes between the sequence of phonemes and their spacing.

The principal difference between the two systems is that Harris allows his phonemes to occur simultaneously. Thus, the difference between two contours which is expressed in our system by symbolizing one as 232 and the other as 343 could be expressed in another way. Let us set up a phoneme R whose effect is to raise each following phoneme except 4 one step; this effect will continue until the end of the utterance, or until halted by another phoneme T. Then 343 = R232. Now if we choose to treat the sequence 232 as one phoneme S, 343 would consist of two: RS. This is in conformity with an analysis into components or scope phonemes, such as Harris has propounded in his paper. But it deviates considerably, as any analysis of phonemes into components will, from the principles of segmentation and phonetic similarity.

TWO OTHER POSSIBILITIES

Finally, two modifications of our system are possible. Each has a *prima facie* lure; but each violates a useful principle of phonemics and is therefore rejected.

²⁴ In the *Grammar of Spoken English* by himself and F. G. Blandford (2d ed. 1939), Palmer divides his former No. I into two: a high-falling and a low-falling (§§20-39). This is a change of details, not of method.

²⁵ *Simultaneous Components in Phonology*, LANG. 20.181 ff. (1944).

1. If we set up a system which assumes syllables, we could treat each syllable as containing at least one pitch phoneme; for instance, ²*Why* ²*didn't* ²*he* ³*come?* This system would allow iteration of pitch phonemes; and, as a notational device, we could perfectly well write all the pitch phonemes first, enclosing any two which occur in the same syllable in parentheses; thus, 2222(31) *Why didn't he come?*

The disadvantages of this system are two. It would demand the recognition of many morpheme alternants—contours differing only in the number of times the respective pitch phonemes are iterated; and it would not take account of the automatic elements in the pitch contour. We should have to say, in general, that where P is a pitch phoneme, PP is a morpheme alternant of P. The alternation would be automatic, i.e. predictable; but there is no need to have alternants at all.

2. The other modification to be considered looks like a trick. We reduce the number of pitch phonemes from four to two, P and Q, as follows: P may be iterated two, three or four times:

P	= phoneme 1
PP	= phoneme 2
PPP	= phoneme 3
PPPP	= phoneme 4

Successive occurrences of P operate simultaneously, backwards and forwards, until stopped by an occurrence of Q or of pause in either direction.

Obviously, any system containing any number of phonemes can be 'analyzed' into two phonemes in this way: one iterable, the other punctuative. Yet in this particular case, the analysis can be made to appear not unpalatable. P, we may say, has one value throughout: a raising value. By itself it raises zero to pitch phoneme 1; operating on 1 it raises this to 2; and so on. Q, like any ordinary phoneme, halts the effect of what precedes (and of what follows). So the pattern 231 (as analyzed by the system of this paper) could be reanalyzed as PPQPPQP. P and Q would contrast minimally; PPPP (i.e. 4) would contrast phonemically with PPQP (i.e. 21); (Q would not occur initially or finally; and there would be limitations of pattern exactly analogous to those of the four-phoneme system: just as 212 does not occur, so PPQPQP also would not occur.

We have already (Part 2) found reason to admit phonemes which act simultaneously with each other; but here we have a special case of a phoneme acting simultaneously with another occurrence of itself. And this is no doubt the reason why this two-phoneme system would be rejected by most phonemicists: the fact that, of the two phonemes, neither one has segments—actual phones—as its members.

This study does not profess to delineate a general method for analyzing the suprasegmental phonemes of every language; still less does it purport to reveal whether or not a given language has suprasegmental phonemes. All that has been done is to apply the received methods of phonemics to a phase of English phonology where, so far as we are aware, they have not been applied in quite the same way before. And a phonemicist quite ignorant of English would doubtless, sooner or later, stumble upon the fact that English

phonemes are profitably divided into segmental and suprasegmental, and that stress and pitch are among the latter; but no method has been devised which will automatically, even if laboriously, lead him to this discovery.

Attention to the facts of distribution (patterning) is a close approach to such a method; and we may take the pragmatic view that the success of the theory here presented is independent of its general validity, that is, of its applicability to any language whatever.

ALGONQUIAN *nasaump* AND *napōpi*: FRENCH LOANWORDS?

JAMES A. GEARY

CATHOLIC UNIVERSITY OF AMERICA

[A study of these two words, along with some others of similar meaning, seems to point to borrowing from French.]

The English word *samp* is said by Roger Williams, Key into the language of America 11 (1936 reprint of the original edition of 1643), to be derived from the Indian *nasaump*, which he gives as the Narrangansett form, with a variant *nawsaump*, and thus defines: '*Nasaump*, a kind of meal pottage, unparched; from this the English call their *samp*, which is the Indian corn, beaten and boiled, and eaten hot or cold with milk or butter, which are mercies beyond the Natives' plain water, and which is a dish exceeding wholesome for the English bodies.' He refers to it again on page 114: '*Sickissuog*, clams. *Obs.* This is a sweet kind of shellfish . . . ; this fish, and the natural liquor of it, they boil, and it makes their broth and their *nasaump* (which is a kind of thickened broth), and their bread, seasonable and savory, in stead of salt . . . ' The Handbook of American Indians 2.422 (Bureau of American Ethnology, Bulletin 30) describes *samp* as 'a maize porridge, once a very important article of food in New England and elsewhere', citing Williams (part of first quotation, above), and mentioning two other references dated 1672 and 1677, which are given in the Oxford Dictionary s.v. *samp*.

The translation 'softened with water' given in Bull. 30 for the Narrangansett *nasaump*, and suggested by Trumbull's Natick Dictionary (Bur. of Amer. Ethn., Bull. 25 s.v. *saupae*), does not seem exact. Trumbull cites other forms to which are attributed similar meanings: '*sābahég* "pottage", "that which is made soft, boiled food"; *sappaen* (modern *suppaw*, *sepaun*, *sepon*, Webster) for *saupāun* "softened", along with a citation dated 1671; '*sobososi* "it is melted" [= 'that which is melted', animate, conjunct mode], *sābosasu* "he melts it" [= 'it is melted' animate, independent mode]'; and also some variant spellings are given. These forms tempt one to look for a stem meaning 'soften' to serve as prototype for Natick (etc.) *sab-*, *sob-*, *saup-*. Such a stem would be PA **sap-*, **cap-*, **samp-*, or **camp-*, since in the New England languages an original PA nasal cluster usually loses its nasal, while on the other hand the nasal clusters which actually appear are due to an intrusive nasal after *ō* or *au* from PA **ā*.

Evidence in favor of the former statement is seen in Natick *weekon* 'it is sweet': PA **wēnk-an-*; *wunnutch* 'his hand': PA **u-* (or **we-*) *-θcentci*; *me-nukque* 'the armpit': PA **me-θenkwi*; Narragansett *wuttip* 'his brain': PA **u-* (or **we-*) *tempi*. There are some exceptions, e.g. *nuttinonkumóog* 'I have them as relatives': PA **netēānkōmāwaki*; *ontseu* 'he descends from': PA **untcīwa*; *omp-andeu* 'he lifted himself up': PA **ump-alewihuwa* (latter part not quite certain). On these exceptions see the next paragraph.

Evidence is plentiful in proof that PA **ā* became *ō*, *au* in the New England languages, after which a nasal was developed: *kompae* 'he stands': PA **kāpāwa*;

-omp 'man' : PA **-āpā-*; *nompas* 'male' : PA **nāpāwesiwa* 'he is male'; -ompsk : PA **-āpēxkw-* [**-āpēθkw-*, see Siebert, LANG. 17.300] 'hard substance, stone, metal'; *aunchemóokar* 'he tells news' : PA **ātcimukāwa*; Nat. *sampwi-* 'straight, right, just', Narr. *saūmpi-* 'straight', Quiripi *sompáio* 'it is right' : PA **sāpw-* 'strong', whence Ojibwa *sāb-*, Cree *sāp-*; Natick *nompe* 'again, instead of' : PA **θāpi-*; *wonk-* 'crooked' : PA **wāk-*; *sonkin* 'it sprouts' : PA **sāk-en-*. Here also exceptions occur. We must remember that the transcriptions are by different observers, that in the case of the same observer they are variable and inconsistent (cf. Roger Williams' Key, where even English words are differently spelled on the same page), that various dialects are concerned, and that the printers were ignorant of the Indian languages. Besides, we cannot assume without proof that the two phonetic changes mentioned were already fully completed at the time the recording by English-speakers began with Roger Williams and John Eliot, about 1643; the changes may have been only in the process of taking place. According to Rasle's transcription of Abnaki, about 1691, a nasalized vowel corresponded to Natick *o* or *au* plus nasal, while in modern Abnaki, as recorded by Laurent (New familiar Abenakis and English dialogues, Quebec, 1884), the correspondent is *ô*, with 'o as in notice'. We must suppose that the English-speaking recorders thought they heard a clear nasal (since English has no nasalized vowels in normal speech), while a French-speaking recorder would naturally recognize a nasalized vowel as a familiar sound. Perhaps my statement should be amended in favor of nasalized vowels; but in any case we have to go by the recording, whatever its precise phonetic value. Hence my conclusion that the PA stem invoked by Trumbull for 'soften' should have the form **sap-*, **cap-*, **samp-*, or **camp-*.

Now, no such stem has appeared in Fox, Ojibwa, Algonkin, or Cree, as far as I can discover; Fox should show *sap-* or *cap-*, Ojibwa and Algonkin *sap-*, *cap-*, *samp-*, or *camp-*, and Cree (along with Menominee) *sap-* or *sahp-*. The stem **sāpw-* 'strong' would actually give Narragansett *saump* (see above), but the meaning is unsuitable, and the form with *na-* would go unexplained. Nor does it help if we invoke PA **-āpyā-*, **-āpyi* 'water, liquid, extended thing', though the meaning might be considered suitable for 'porridge'; for that leaves *nas-* to be explained, for which no stem appears that will suffice. Besides, the alternate forms *saump* and *nasaump* suggest that the first syllable is not essential. A stronger objection against invoking **-āpyā-* is that it loses sight of the comparable forms in the languages to the north. The stem **cāpw-* 'penetrate, pierce', which is found in Fox, Ojibwa, Algonkin, and Cree, might possibly give the meaning 'soften' if compounded with an element meaning 'water'; but such an element is lacking in Trumbull's forms, and the compounds in Cree, Algonkin, Ojibwa, and Fox do not favor such a meaning as 'soften'.

The forms *saupaen* etc., to which may be added Virginian *asapan* (Strachey, Historie of travaile into Virginia Britannia; London, 1849), may possibly contain **apwā-* 'roast, cook', preceded by **ici-* 'thus' (which would appear in the New England dialects as *isi-*, *asi-*, and might show loss of initial vowel as in *spukquodt* beside *aspuckquat*, *āshpukquok* 'the taste or flavor of a thing' [recte 'it has such a taste or flavor'], and in several other examples). The form *sabasum*

'he melts or softens by heat' seems to be from **ici-* + **apesamwa* 'he warms it thus', or from **kec-apesamwa* 'he makes it quite hot' with the initial consonant dropped after syncopation of the vowel, as occurred in the case of French *sagamité*, English *sagamity* 'broth' (literally 'heated liquid'), taken from some Algonquian language, cf. Ojibwa *kijāgamide*, Algonkin *kijāgamite*, Cree *kisāgamitew*. In *sabasum* the absence of a nasal speaks against *ā*, and Fox is in agreement with *apesuwa* 'he warms himself, is warm', although Baraga's Ojibwa forms show both *ā* and *a*; **ā* would probably appear as *o*, *au* or *ā* in Natick and Narragansett. This last suggestion would seem to obviate the need of setting up a stem **sap-* etc., and it may be that *saupae* is for **ic-ap-ā-wi* 'it is thus warm' (with loss of initial vowel), and that *sappaen* is for **ic-ap-ā-weni* 'what is thus warmed' (with contraction).

Several other Algonquian words are mentioned in the Handbook s.v. 'hominy' which refer to preparations of maize, and are translated 'hominy', a word which, itself, is known to be of Algonquian origin. In one of them the meaning 'soften' appears clearly, namely in Virginian *rockahominy*, Delaware *lokhamen* 'bran, shorts' (Brinton), Shawnee *lokhaana* 'flour' and *lokhaan-aapo* 'flour-soup' (Voegelin, Indiana Historical Society, Prehistory Research Series 1.347), Natick *noohkik* 'meal, flour, ground corn' (Trumbull), Narragansett *nókehick* 'parched meal', all of which contain PA **lōxk-ah-* 'soften by pounding', the first two adding **-minā-* 'grain'; the Natick and Narragansett forms appear to be the inanimate passive participial. The Handbook (Bull. 30) mentions an Abnaki *nukhamen*, which must be borrowed from an *n*-dialect, since Abnaki has *l* from PA **l*.

A second form (Handbook *ibid.*) is *tackhummin* 'ground grain' (quoted only from 'early writers'); the prior part is to be compared with Shawnee *takhwa* 'bread', *takhwaana* 'bread, loaves', Miami *tākwahikwani* 'grind in a mill or mortar' (Voegelin 139), Fox *tagwahāni* 'hominy, cornmeal', and Fox-Ojibwa *tagwahān-ābō* 'Indian-corn-soup', from **takw-ah-āni* 'what is brought together (into a mass) by pounding' + **-āpōwi* 'liquid'.

A third form (Handbook *ibid.*) is *pokhommin* 'beat or thresh out' [recte 'crack grain'], quoted from 'early writers', apparently from PA **pōxkōhemīnā-* 'break grain by pounding', from an earlier ***pōxkw-ahe-minā-*.

It is not clear whether there were any differences between the preparations of maize designated by these three groups of words or not; neither is it clear whether any or all of them were identical with *samp*. The descriptions are vague, but they all seem to refer to Indian-corn pounded (and, naturally, boiled). In any case, it is clear that the Algonquians had several native words to designate something like what came to be called *samp*, *saump*, or *nasaump* by the English in New England. The Oxford Dictionary gives all the occurrences cited, but no others from any place outside of New England in the case of *samp* and *saump*. And so our attention is directed northward rather than southward.

A comparison of the more northerly Algonquian languages—those of Maine, the Maritime Provinces, and Eastern Canada (which had early contacts with French fishermen, explorers, and settlers)—reveals the following similar or comparable forms: Micmac (in Nova Scotia and adjacent regions) *lasoop* (Rand,

Dictionary of the language of the Micmac Indians s.vv. 'broth', 'soup with vegetables cut up in it'); Montagnais (eastern Quebec, north of the St. Lawrence) *lasup* (Lemoine, Dictionnaire français-montagnais s.v. 'soupe'); Algonkin (further west in Quebec) *anasop* (Cuoq, Lexique de la langue algonquienne; Lemoine, Dictionnaire français-algonquin s.v. 'soupe'). Abnaki *lasob* 'soup, corn-soup' (Laurent 29) should perhaps be set aside as likely to be a modern borrowing from a neighboring language, since the Abnaki of St. Francis, P.Q., migrated thither from Maine mostly in the 18th century (as it seems from the Handbook s.v. 'Abnaki'), and Rasle seems not to have recorded such a form at the end of the 17th century.

Along with these go other forms for 'soup' containing the non-initial stem **-āpōwi* 'liquid', in Micmac, Algonkin, Montagnais, Ojibwa, Menominee, Cree, Fox, and Delaware; and also initial forms based on **napōpi* in Algonkin, Ojibwa, Menominee; but in this latter case Fox has *nepōpi* as if by the analogy of **nepi* 'water', and Miami has *nipopi* (Voegelin 375), evidently borrowed from a neighboring *n*-dialect (unless the same analogy worked here independently; but even then the *n*-initial is foreign to Miami, which is an *l*-dialect). To show that the word goes back to a native source with **l-* (or **θ-*), it would be necessary to have the Cree, Delaware, or Shawnee correspondent from an early date, since Algonkin, Ojibwa, Menominee, and Fox *n* may come from different PA phonemes. The absence of a comparable form in Cree, Delaware, or Shawnee (even though our records are of a later date), favors the idea that these forms are not of native Algonquian origin.

These two groups of forms—the *lasōp* group and the *napōpi* group—are not referable to a single prototype; hence two different sources must be found. On the other hand, the forms in *-āpōwi* are probably of native origin, and are related to **-āpyā-* 'liquid, etc.', cf. PA **nepe* : **nepōwi* 'die'. But the *napōpi* group cannot be so related; I suggest borrowing from French (see below).

Algonkin *anasop* is declared by Cuoq (41) to be derived from the French *la soupe*, and this is supported by comparison of some parallel borrowings which he gives. Probably the French original is really *à la soupe*: cf. *anapoc* 'pocket' from *à la poche*, *anacanb* 'chamber' from *à la chambre* and *anamens* 'the Mass' from *à la messe*—as if all these were due to locative phrases, which may well have been frequently used in all four cases. Trumbull (146) quotes from Rasle an Abnaki form *ntsañbañ* (*añ* = nasalized *a*) 'sagamité' (= 'soup, porridge'); the modern Abnaki form is given by Laurent (29) as *nsōbōn* 'soup, corn-soup' (along with *lasob*, mentioned above); and Rand gives Micmac *sabān* 'porridge' (along with *lasoop*, mentioned above). These two forms are hard to equate with the *lasōp* and *napōpi* forms. With Rasle's form may be compared also Laurent's *kzōbō* 'broth, soup', presumably from **kec-āpōwi* 'heated liquid', or from **kec-āp-ā-wi* contaminated with the former. The initial *n-* in Rasle's form and in Laurent's *nsōbōn* is difficult to explain, but may be due to the influence of Algonkin *anasop*, and may imply an Algonkin *†nasop* = Narrangansett *nasaump*. It is possible that it is the possessive prefix = 'my', and that in Rasle's form *ts* is a mishearing, miswriting, or misreading for *ks*, or even that it has *ts* for palatal *k*, as in Montagnais.

A more likely explanation would be that the forms ending in *-n*, namely Abnaki *ntsaiñbañ* (Rasle) and *nsôbôn* (Laurent), Micmac *sabân*, and Trumbull's *sappaen*, *saupdun*, etc., represent the French form which still lives in Canadian French *soupane*, *soupone* 'Bouillie de gruau d'avoine, de maïs, etc.' (Glossaire 636).

Now, if Algonkin *anasop*, and with it Narrangansett *nasaump* and all the rest of the *lasôp* group, can be referred to French (*à*) *la soupe*, it is possible also that *napôpi* may be a loanword from French. One thinks immediately of *la bouillabaisse* 'fish soup or stew'; but it is remarkable that a dialectal variant of this form is still in use in the French parler of the Isle of Orleans, Quebec, namely *la boubaisse* (pronounced *la boubasse*, as one might expect); I have to thank my colleague, Mr. John L. Brown, who noted it during the summer of 1941, for this information. This form, by the way, is not listed in the Glossaire published by the Société du parler français au Canada (Quebec, 1930). Save for the termination *-aisse*, this form is exactly what is needed to explain Algonquian **lapôpi*, which would normally appear as *napôpi* in all the languages that have the word except Miami, which seems therefore to have borrowed it from an *n*-language, as stated above. The loss of the termination is easily explained by the fact that it practically coincides in sound with the Algonquian diminutive ending **-êhsi*, and so would naturally enough be disregarded unless the circumstances called for it. Note that in Algonquian *u* and *o* are not distinguished phonemically, nor are *p* and *b*.

Hence it seems likely that these two groups of forms that lack clear Algonquian etymologies are both French loanwords, the *lasôp*, *nasôp* group from (*à*) *la soupe*, the *napôpi* group from *la boub-aisse*.

Two questions immediately arise. There is, first, the geographical question: Could a word borrowed from French in Canada or the Maritime Provinces, where French influence was certainly incident from an early period, penetrate to southern New England as early as 1643?

This question was already answered by Roger Williams in 1643. In the Key 152 we read (after a discussion of wampum): 'The Indians bring down all their sorts of furs, which they take in the country, both to the Indians and to the English, for this Indian money: this money the English, French, and Dutch trade to the Indians, six hundred miles in several parts (north and south from New England) for their furs, and whatsoever they stand in need of from them: as corn, venison, etc.' On page 184 (referring to drums): 'Not that they had such of their own making; yet such they have from the French.' On page 185: '*Shottash*, shot, a made word from us, though their guns they have from the French, and often sell many a score to the English, when they are a little out of frame or kelter.' Now, six hundred miles northward of southern New England would reach not only the St. Lawrence valley at the nearest point, but even the Gulf of St. Lawrence. In a southerly direction, the same span would reach as far as North Carolina. Hence there is no geographical difficulty as far as *lasôp* is concerned. As for the **lapôpi*, *napôpi* group of words, while chronological data as to the occurrence of the forms is lacking, the geographical location of the tribes who later used these forms is precisely along the routes followed by the

early French missionaries, traders, and trappers, namely, westward from the neighborhood of Quebec along the St. Lawrence and the Ottawa rivers, thence through the Great Lake Region westward and southward, thus making contact with the Algonkin, Ojibwa, Menominee, and Fox, and indirectly the Miami.

A second question may arise, from the cultural point of view: Why should French words be borrowed to designate what was already in common use, when there were native words in use for approximately the same thing from New England to Virginia, as attested from the same early period? There are various motives for borrowing. One is the lexical need of a word to denote a new thing, hitherto unknown; it may be that the French settlers introduced a new kind of soup (the French cuisine has a reputation!), and I may refer back to Rand's entry of *lasoop* as Micmac for 'soup with vegetables cut up in it'. But this is probably of little importance. Another and more prominent motive for borrowing foreign words arises from the actual domestic circumstances of families formed by the intermarriage of French settlers with Algonquian women. This is known to have been frequent, and to have contributed greatly to the friendly relations that have generally existed between the two peoples. Naturally such marriages were not always made between two individuals who were already bilingual. In such circumstances, we may well imagine that an Algonquian wife might prepare an Indian dish composed of maize—unknown in Europe!—and that, no matter what she might call it in her own language, her French husband would naturally call it, in his language, *la soupe*; and one can imagine various reasons or motives that would induce her to adopt his term, and use it along with her own. The simultaneous use of a native word and of a borrowed word under the circumstances portrayed is quite understandable—in fact, it is so natural that one would find it hard to show that it would not take place. The continued use of such a borrowed term would, of course, depend on various circumstances, which cannot be determined theoretically. The actual use of the forms cited, even to the present day, shows their survival in fact; and I think I have shown the probability of their French origin. The same reasoning applies, of course, to the words of the *napōpi* group.

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We acknowledge here the receipt of such works as appear to bear on the scientific study of language. This acknowledgment is regarded as a full return for the presentation of the work; no book can be returned to the publisher. Reviews will be published as circumstances permit, and copies will be sent to the publishers of the works reviewed.

Members of the Linguistic Society who wish to review any of the books here listed are invited to communicate with the Editor. Books reviewed become the property of the reviewer. Numbers of journals are not available for review.

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THE ETYMOLOGY OF ΙΧΩΡ¹

GEORGE MELVILLE BOLLING

OHIO STATE UNIVERSITY

In the fifth book of the Iliad is a tangle of textual and linguistic problems. The poet, after telling how Diomedes stabbed Aphrodite's arm near the hand, finishes (if we disregard for a moment lines 340-2, which will turn out to be an interpolation) his description of the encounter (339):

ῥέε δ' ἄμβροτον αἶμα θεοῖο.

Later, however, he calls (416) what was wiped off her arm not αἶμα, but something else.

Just what he called it is uncertain. The syntax shows that the form used was an accusative, but the MSS present it variously: *ιχω̄*, *ιχω̄*, *ιχω̄ρ*, *ιχω̄ρ*, not to mention the unmetrical *ιχω̄ρα* of one late MS. We are badly off for scholia here, since cod. A is lacking for E 336-635. So all we hear about the opinions of ancient scholars is Eustathius' statement that the reading with rho: *οὐ πάνυ ἀρέσκει τοῖς παλαιοῖς*. Influenced by this, many editors print *ιχω̄*; but van Leeuwen and Mendes da Costa (1895) read *ιχωρ*, which is my own preference.

There seems to be a contradiction between the flowing of αἶμα and the wiping off of *ιχωρ*. The first (340) of the interpolated lines is an attempt to do away with this by explaining in an appositional construction that what is blood in a mortal is *ichor* in a god:

ῥέε δ' ἄμβροτον αἶμα θεοῖο,
ιχω̄ρ, οἷός περ τε ῥέει μακάρεσσι θεοῖσιν.

'The divine blood of the goddess, *ichor*, such as flows in the blessed gods.' That raises a second problem: Why this difference? The answer (341-2) follows:

οὐ γὰρ σῖτον ἔδουσ', οὐ πίνουσ' αἶθοπα οἶνον·
τοῖνεκ' ἀναίμονές εἰσι καὶ ἀθάνατοι καλέονται.

'For they eat not grain, they drink not sparkling wine; That is why they are bloodless and are exempt from death.'

On grounds of intrinsic probability—no others are available—the genuineness of the passage has been questioned ever since the beginning of modern work on the poem. Wolf bracketed the last line (342); Wilhelm von Humboldt (*Werke* 5.86) saw that the preceding line must go with it; while Heyne was acquainted with an opinion that all three lines are interpolated. This verdict has been repeated: 'These lines certainly read like an interpolation' (Paley); 'iure dam-nasse videtur vir doctus apud Heynium' (van Leeuwen and Mendes da Costa); 'appear to be a very poor interpolation' (Leaf).

The first thing to note is that—whatever may be true of line 416—the inter-

¹ This article is an outgrowth of an edition of the Iliad. In this connection I gratefully acknowledge a Minor Grant made by the American Council of Learned Societies for clerical and research assistance.

polator used a masculine noun *ιχώρ*. Bentley, to be sure, wished to correct *ιχώρ*, *οἶος* to *ἰχώρ*, *οἶον*, and is followed by van Leeuwen. The reading turns up in one late MS, where it can be nothing more than a secondary accident.^{1a}

The three lines suggested to Paley the age of Epicurus. I should not date them so late, but would associate them, broadly speaking, with the Orphic additions² to the eleventh book of the *Odyssey*. They come from a similar sphere of thought, though they are less elaborate, and probably later. In them I see a self-consistent statement of religious beliefs. It is of course incomplete; for the man was not making a profession of faith, but using only so much of his creed as seemed sufficient to cover up the (apparent) contradiction between the *αἵμα* of line 339 and the *ἰχώρ* of line 416.

Stripped of its epic dress the belief may be restated: the Gods maintain (and, no doubt, attained) their divinity by abstinence. Abstinence takes the *αἵμα* out of one, and what is left is *ιχώρ*.³ An obvious corollary to that belief is: If you wish to become like the Gods—*ὁμοίωσις τῷ θεῷ*⁴—practise abstinence. Millions of people have accepted similar beliefs as intuitively perceived truth; many have actually testified to their faith by slowly starving themselves to death.⁵ To others—more logically minded—such beliefs seem simply absurd, and they must acquiesce in Leaf's opinion that the last line 'is a meaningless *non-sequitur*'.

Religions of this type—those associated with the names of Orpheus, Pythagoras, Empedocles—are known to have been widely prevalent in Attica in the 6th and 5th centuries. It is one of their votaries who is speaking here. That we cannot place him more definitely is not surprising. We have no reason to assume that he has given a complete list of his food taboos, nor have we in detail the ordinances of any sect with which to compare them. Epimenides, the Medicine Man from Crete, who 'lived on certain wild plants'⁶ is perhaps the closest parallel.

The equation of *ιχώρ* with what in Gods takes the place of blood I regard, then, as part of the religious speculations of some mystic sect and not (with Leaf) as the ad hoc improvisation of an interpolator. Leaf says that it was 'not adopted by any later poet'. That would not be surprising, and is probably not quite correct.

The question hinges on the interpretation of Aeschylus, *Agamemnon* 1480:

πρὶν καταλῆξαι
τὸ παλαιὸν ἄχος, νεὸς ἰχώρ.

^{1a} Or, possibly, some hyperlogician wished the adjective to be in agreement with *αἵμα*, and not with the nearer appositive *ιχώρ*.

² For my restricted use of the term *interpolation* compare Athetized Lines 123 n.; cf. also Cauer, *Grundr. d. hom. Kritik*³ 118. It is impossible to classify (and so date) lines 340-2 definitely as long as we are restricted to grounds of intrinsic probability. I consider the ascription of them to some *λυρικός* of the 5th century the most probable explanation of their authorship.

³ Or *ιχώρ* is mystically substituted for *αἵμα* by abstinence.

⁴ Plato, *Theaetetus* 176b.

⁵ Compare Franklin Edgerton, *The Bhagavad Gītā* 2.28 (Harvard Oriental Series 31, 1944).

⁶ Nilsson, *A History of Greek Religion* 203.

'Before the old woe is ended, (there is) fresh *ichor*'. Leaf (following Paley, and followed by Liddell and Scott) says that it is here used 'in the sense of "blood" simply'. To this Headlam⁷ objected: 'What is *ιχώρ*? It is taken to mean "gore", "blood-shed"—a sense incredible . . . *ιχώρ* is a *humour*, *lymph*, *serum*; never blood'. Both parties have missed the mystic connotation that makes *ιχώρ* the precise word for this context. What is here being shed ever anew is the blood of the Tantalidae, Zeus-nurtured kings; and that is not *αἷμα* but *ιχώρ*.⁸ The selection of the word charges the passage with emotion, similar to the storm that broke out on the execution of Charles the First.

The word *ιχώρ*, *-ῶπος* (*δ*) starts (for us) as a technical term of medicine with a central meaning 'blood serum'. From this it spreads and comes to designate the watery part of other animal juices, and serous discharges. Liddell and Scott can cite numerous examples of such usage from the Hippocratic corpus, Plato, Aristotle, and later writers; apart from the two passages I have treated we know nothing more. This is of immediate interest because of the intimate connection between scientific medicine and the mystic sects. For the Pythagoreans reference to Burnet, *Early Greek Philosophy*³ 97, 193 ff., must suffice. Empedocles⁹ is more interesting because he had a theory of the movement of the blood that brought him 'to the verge of anticipating Harvey and Toricelli'.¹⁰ In our interpolation too we find the *ιχώρ* moving in the Gods and thus implying that *αἷμα* moves in men. The circulation of the blood is an idea so familiar to us that we do not note the single appearance in Homer of blood moving within the body as an anachronism.

In line 416 we have a choice: whether to read a neuter *ιχωρ*, or a masculine or feminine (hardly a neuter plural) *ιχω* < **ιχσσα*, the nominative of which would be **ιχως*. Neither word is attested elsewhere, and to whichever we choose we can assign a meaning 'blood', 'gore', or the like that makes it practically synonymous with the *αἷμα* of line 339 and thus does away with the apparent contradiction.

The former seems to me the much more probable alternative for a number of reasons. (1) The interpolator was more apt to identify *ιχωρ* with his medical-mystic *ιχώρ*, and thus be started on his needless task. (2) A neuter *ιχωρ* will be a continuant of an IE *r/n* stem, and such are found frequently as designations of parts of the body. (3) We are thus brought¹¹ to a pair *ιχωρ-ιχαρ* which we would expect; compare *τέκμων-τέκμαρ*. (4) To connect *ιχωρ* with *ιχώρ* is less

⁷ Class. Rev. 12.247-8 (1898). He ends with an emendation (*ιχαρ*) which is accepted by Verral, but brushed off by Lawson.

⁸ I may quote from the NED the phrase: 'The azure ichor of this elite of the earth', Ford, *Handbk. Spain* 1.295.

⁹ Compare Burnet 200 f., 231.

¹⁰ Burnet 27.

¹¹ Strictly speaking, *ιχαρ* is not attested. In Aeschylus Suppl. 850 *ιχαρ* stands in a meaningless jumble of letters; and the scholiast (M) says *τὴν ἐπιθυμίαν ιχαρ εἶπεν*. That is the source of Theognostus, from whom the equation *ιχαρ = ἐπιθυμία* passed (via Hermann on the passage) to Wackernagel; compare below. Headlam demanded *ιχαρ* on morphological grounds (*ιχαρ : ιχανᾶν = μῆχαρ : μῆχανᾶν*) and we can now see that a short vowel in ablaut with *ā(i)*—compare below—would be most unusual. Headlam is rightly followed by Liddell and Scott.

difficult than to establish a connection between **ιχωῶ* and *ιχώρ*. (5) The supposed support for *ιχωῶ* as an 'anomalous form' = *ιχωῶρα* is an illusion. Herodian (2.938 L) lays down a rule: no non-monosyllabic neuter in *-ωρ* has a cluster of consonants before the *ω*. After *ἐλωρ*, *νίκωρ*, and *ῥδωρ* is cited *ἐλδωρ*, which is not a real exception, for here the consonants do not form a cluster, but belong to different syllables (*διάστας*); besides, Ibycus sometimes uses the word as a feminine. Two examples of this are given¹² which Diehl prints following the MSS:

(24) οὐ τι κατὰ σφετέραν ἐέλδωρ

(25) ἐσθλὸν προδεγεμένων ἐέλδωρ

Earlier scholars, no doubt under the influence of *ιχωῶ*, emended to *ἐέλδω* (*ἐελδῶ*), and the form is now in our grammars.

In his *Vermischte Beiträge zur gr. Sprachkunde* 17-8 (Basel, 1897), Wackernagel has brought together an interesting group of words.¹³ The meaning common to the group is that of English *want*: 'desire, lack, need'. The basic syllable shows the ablaut *ā(i)* : *ī*. The group comprises:

without suffix: Skt. *īhate* 'yearns';

an *i*-stem: Av. *āzi-* 'Begierde, Gier';

an *n*-stem: *ιχανάω* 'yearns', Homer P 572, Ψ 300, Θ 288¹⁴; Herond. 7.26; Babrios 77.2;

Ἰχάνα 'a Sicilian village', Stephanus of Byzantium;

ἀχῆν 'poor, needy', Theocr. 16.37;¹⁵

ἡχῆνες 'κενοί, πτωχοί' Hesychius;

an *s*-stem: *κτεανήχης* 'πένης' Hesychius;

an *r/n* stem: *ιχαρ* 'vehement desire', Aeschylus.

To this group I would add the neuter *ιχωρ* 'blood'. Formally there is no difficulty: a pair such as *ιχωρ-ιχαρ* is to be expected. Semantically the connection may seem surprising, but it must cease to be so. Pairs of sememes 'part of the body' : 'a psychic process supposedly located in it' are frequently found connected with a single word or distributed between two closely related words. Examples are: *φρένες* 'diaphragm' : 'mind'; *χολή* 'bile' : *χόλος* 'wrath'; Latin *animus-anima*; English *brain, heart, pluck, guts*. Of the same pattern is *ιχωρ* 'blood' : *ιχαρ* 'vehement desire'.¹⁶

In competition with *αἷμα*, the neuter *ιχωρ* lost out, leaving us no record except

¹² They may or may not prove the point. If so, *ἐέλδωρ* has (like *ταλάωρ*) changed its gender under the influence of some synonym. The second quotation is hopelessly corrupt.

¹³ For a review of the earlier stages of the problem compare Bechtel, *Lexilogus zu Homer* 182-3 (Halle, 1914).

¹⁴ More or less confused in the tradition with *ισχανάω*.

¹⁵ A misunderstanding of the word is seen in Proclus on Plato's *Cratylus* lxxxv (39.15 Pasquali): λέγει γὰρ τις αὐτῶν (poetarum) ἀχῆνας τοὺς πένητας, παρὰ τὴν στέρησιν τοῦ ἔχειν ἰδίως οὕτως καλέσας. Such 'popular etymology' led to Attic *ἀχηνία* (Aesch. Aristoph.) and to the form of some Alexandrian poet found in Hesychius' gloss *ἀεχῆνες* 'πένητες'.

¹⁶ I may add: *ἡαρ* (akin to Skt. *asr-k*, Lat. *asser*) is glossed both with *αἷμα* and with *ψυχή* by Hesychius. For Empedocles the blood is the seat of intelligence.

for the single occurrence in Homer. With shifted meaning and shifted declension it survived in the technical medical term *ιχώρ* 'blood serum'.

There remains the question of the relationship between *ιχωρ* (τό) 'blood' and *ιχώρ* (ό) 'blood serum' > 'blood of the gods', 'blood of kings'. The forming of *ιχώρ* is to be explained, I believe, as a change within Greek itself, not as an inheritance. It is an item in the later history of the *r/n* stems, the earlier stages of which have been treated by Benveniste.¹⁷ I shall confine myself to the part of immediate interest—the fate in Greek of the neuters in *-ωρ*. A few survive with the heteroclitic inflexion: *ῥδωρ*, *ῥδατος*; *σκῶρ*, *σκατός*. Of others only the form in *-ωρ* has reached us, either in the function of a noun (*ἐέδωρ*, *τέκμωρ*) or of an adverb (*νύκτωρ*). In others the *-ωρ* has been carried analogically through the paradigm.¹⁸ This is rather surprising, since *φῶρ*, *φωρός* is the only other word with this inflection in Greek. An example is *ἐλωρ*, *ἐλωρα*. Such a plural could easily lead to a transfer to the *o*-declension,¹⁹ as in *πέλωρ*, *πέλωρα*, *πέλωρον*, *πελώρου*, which in turn leads, as early as Hesiod, to an adjective *πέλωρος* (-η, -ον).²⁰ Another derivative adjective is *πελώριος*, and the plural of such is found suppletively with the underlying word in *ἐλωρ*, *ἐλώρια*. In imitation of this is *ταλαώρια* : *ταλάωρ*, if we so correct Hesychius' gloss *ταλαώρεα τοξείματα*. The transfer to the *o*-inflection is blocked by a change of gender. This may be seen in *μήστωρ* 'deviser', *κέλωρ* 'son', and *ταλάωρ* 'bow'. In the last the shift of gender is due to the synonym *βιός*; in the other two the reason is obvious. It is evident that this is what has happened in *ιχωρ* > *ιχώρ*; but I can suggest no reason for the change either of gender or of accent.

POSTSCRIPT

Another objection to reading in 416 *ιχω̑* < **ιχοσα* is the fact that *s*-stems may be expected to be attached to forms of the base with strong vocalism, as in *κτεαν-ήχης*, reported by Hesychius.

In style lines 340–2 vary so markedly from the *Iliad* that on this ground alone they should be recognized as an interpolation. The point is the asyndetic joining of negative phrases:

οὐ γὰρ σῖτον ἔδουσ', οὐ πίνουσ' αἰθοπα οἶνον.

Wackernagel (Syntax 2.310) is content to note merely that such constructions are in Greek, Latin, and German confined almost entirely to poetic or rhetorical passages. Kühner-Gerth (2.290) remarks on their use with rhetorical emphasis especially in emotional speech. Emotional rhetoric of this sort is foreign to the

¹⁷ In Benveniste, *Origines de la formation des noms en indoeuropéen* (Paris, 1935) it does not seem to be treated. No mention of *ιχώρ* is made; in E 340 *ιχωρ*, *οἶον* is apparently read. The length of the vowel is marked in *ιχαρ*, though an acute accent is also printed.

¹⁸ There is also the type *ἄχωρ -ορος* (ό) 'dandruff' of less immediate interest for my problem. I am indebted to Professor Buck for information that will soon be generally accessible in his work on Greek nominal suffixes.

¹⁹ Has something of the sort happened at an earlier period in the case of *δῶρον* : Lat. *donum*?

²⁰ Compare Bechtel, *Lexilogus* 274–6.

style of the epic narrative. The earliest example cited by Kühner-Gerth is Hymn. Merc. 263 f.:

οὐκ ἴδον, οὐ πυθόμην, οὐκ ἄλλου μῦθον ἀκουσα·
οὐκ ἂν μηνύσαιμ', οὐκ ἂν μήνυτρον ἀροίμην.

That, be it noted, is not in narrative but from a speech.²¹

I know of no example from the Iliad, and of but two in the Odyssey—both from its last book, and both in speeches. They are 246 and 256:

246: οὐ φυτόν, οὐ σκέη, οὐκ ἄμπελος, οὐ μὲν ἐλαίη,
οὐκ ὄγχνη, οὐ πρασιή τοι ἄνευ κομιδῆς κατὰ κῆπον.

256: οὐ γὰρ ἐμοὶ πείθεσθ', οὐ Μέντορι ποιμένι λαῶν.

The modern character of this book is often commented upon—recently by Wackernagel (Syntax 2.303) in dealing with another complicated use of *οὐ* in a neighboring (*ω* 251) passage.

The emotional rhetoric is out of keeping with epic narrative, but its occurrence is understandable in the language of a mystic speaking about his religion.

²¹ Note that when Apollo quotes to Zeus these two lines (363–4), he halves the emotional rhetoric by changing the second to:

οὐδὲ κε μηνύσαιμ', οὐδ' ἂν μήνυτρον ἀροίμην.

In the first passage it may be questioned how far the asyndeton extends. In the next lines (265–6) the MSS have *οὔτε* ... *οὐδ'*, which evidently needs correction. Allen-Halliday (following Baumeister) change to normal syntax *οὐδὲ* ... *οὐδ'*, while Hermann's *οὐ τι* ... *οὐδ'* is more in keeping with the immediate context. If that is judged desirable, *οὐ τι* ... *οὐκ* may be considered, or (with least change) *οὔτε* ... *οὔτ'*: the two lines paired, but joined asyndetically to what precedes.

THE NAME OF HYSTASPES

ROLAND G. KENT

UNIVERSITY OF PENNSYLVANIA

The name *Vištāspa-*, which the Greeks represented by *Hystaspes*, belongs to a number of personages in Iranian history: the East Iranian ruler who was Zoroaster's first royal convert, the father of Darius the Great, and several minor princely descendents of Darius.¹ That Zoroaster's patron was identical with Darius's father is most unlikely, though it has been and is still maintained by some scholars;² but that problem lies outside the field of the present discussion. Only so far does it at the moment interest me, that the name *Vištāspa* appears to have gained prestige from the fact that it was the name of Zoroaster's patron, and therefore enjoyed a vogue in the line of Achaemenian princes.

My topic is the etymology of the name, which appears as *Vištāspa-* or *Vīštāspa-* in the Old Persian inscriptions, and as *Vištāspa-* in the Avestan texts. Neither the defective writing in OP (*vi-ša-ta-a-sa-pa-* for *vi-i-ša-* . . .) nor the length of the first vowel in Avestan has any significance; the name was *Vištāspa-*, a compound of *višta-* + *aspa-*, of the regular Indo-European type of personal names. As *aspa-* is the well-known Iranian equivalent of Skt. *aśva-*, Latin *equo-*, the name means 'whose horses are *višta-*' or 'having *višta-* horses'. The only problem is the finding of a suitable etymology for *višta-*.

The earliest etymology for *višta-* seems to have been that proposed by Fick in 1874:³ *višta-* is the participle to root *vid-* 'find',⁴ cf. Skt. pres. *vindāti* 'he finds' to root *vid-*, and OP *Viḍafarnā* 'Intaphernes' (Aryan **vindat-svarnās* 'Finding the royal splendor'). This seems to have found no acceptance, perhaps because the participle of *vid-* was in Avestan *vista-*⁵ and not *višta-*; the Aryan change of *s* to *š* after *i* took place before PIE *tst* (from *t-t* or *d-t*) had become *st*.⁶ At any rate such a meaning as 'he whose (or by whom) horses have been found' seems rather pointless; which may be the reason why Hoffmann-Kutschke in 1908,⁷ in reviving this etymology, preferred to take *višta-* from root *vid-* 'know',⁸ thus interpreting the name as 'he by whom horses are known = having knowledge of horses' (in his own words, 'sich auf Rossen verstehend'). There is still the irregularity of

¹ F. Justi, *Iranisches Namenbuch* 372 s.v. (1895); Bartholomae, *Altiranisches Wörterbuch* 1473-4 s.v. (1904).

² Sample references: for the identification, K. F. Geldner, *Grundriss der iranischen Philologie* 2.37; against it, Chr. Bartholomae, *AiW* 1474 s.v., note 1; full consideration of the evidence, A. V. W. Jackson, *JAOS* 17.1-22, with the conclusion that the two were not identical, though the gap in time between them was not very great.

³ A. Fick, *Die griechischen Personennamen* cxxxv (1874).

⁴ Cf. Bartholomae, *AiW* 1318 s.v. ²*vaēd-*.

⁵ The Skt. equivalent is *vittā-*; in this the *-tt-* is analogical, cf. my article in *Lang.* 8.18-26.

⁶ The *-st-* may have developed from *-tst-* in pre-Iranian, but the dating is confused by the analogical substitution of *-tt-* in Indic; cf. note 5.

⁷ A. Hoffmann-Kutschke, *Die altpersischen Keilinschriften des Grosskönigs Dārja-wausch des Ersten am Berge Bagistān* 46 (1908).

⁸ Bartholomae, *AiW* 1314 s.v. ¹*vaēd-*.

the *-št-*; for the participle of *vid-* 'know'—in reality identical with *vid-* 'find'⁹—is *vista-* in Avestan and not *višta-*: which stumbling-block Hoffmann-Kutschke seeks to set aside by saying that 'für st aus d-t ist dann allerdings št eingetreten, dürfte aber wegen des vorhergehenden -i- nicht auffällig sein.' But this view, which is against the regular phonetic development, must count as unsuccessful.

A second etymology is that of Bartholomae:¹⁰ *višta-* is **vi-sd-ta-*, participle to *vi-sad-*,¹¹ identical in meaning with Skt. *vi-śaṇṇa-* 'dejected', participle with *-na-* suffix to *vi-śad-* 'to be exhausted or dejected'; for the Iranian formation, cf. Bal. *ništa* 'sitting', participle to *ni-sad-*, and for the variation in vocalism cf. Av. *daēvō.dātō* 'von den *Daēva* geschaffen' and Skt. *devā-tta-* 'god-given'.¹² Thus he interprets *Vištāspa-* as 'verzagte, scheuende Pferde habend' or 'verzagte, scheue Pferde besitzend'.

There is one immediate objection, on the score of meaning. German *verzagt* means 'despondent, dispirited', and *scheu* or *scheuend* means 'shy, timid, skittish, shying', the last two meanings especially of horses. Why a word which means *verzagt* should also have the meaning *scheu* or *scheuend* is not clear. Tolman¹³ seems to have felt this difficulty, for he interprets the name only as 'he of spiritless horses'. This meaning also is alone warranted by the Sanskrit cognate: the verb *vi-śad-* is glossed¹⁴ by 'to be exhausted or dejected, despond, despair; to sink down, be immersed in (loc.)', and the participle *vi-śaṇṇa-* by 'dejected, sad, despairing, sorrowful, downcast, out of spirits or temper'. There is also the fact that despite the formal parallel of Bal. *ništa*, the combination *vi-śad-* does not occur in Iranian in any other extant word.

In addition to these reasons for considering Bartholomae's interpretation of the name *Vištāspa-* as dubious, there is another consideration which may be of a subjective nature, but none the less has its weight: Herodotus¹⁵ tells us that the Persian boys, from the age of five to the age of twenty years, were taught three things only, to ride the horse, to use the bow, to speak the truth. If horsemanship had such a primary place in Persian education, it is hardly likely¹⁶ that the

⁹ Cf. W. D. Whitney, *The Roots, Verb-Forms, and Primary Derivatives of the Sanskrit Language* 160, s.v. *vid* 'find', at the end.

¹⁰ Bartholomae, *ZDMG* 44.553 (1890); *Gdr. d. iran. Phil.* vol. 1, §96.1 and note 3; *AiW* 1473-4 s.v.

¹¹ This compound is awkward in citation: Proto-IE root **sed-* became Proto-Aryan *sad-*, Indic *sad-*, Iran. *had-*; the compound **vi + sed-* became Proto-Aryan *vi-śad-*, Indic (Skt.) *vi-śad-*, Iran. *vi-śad-*.

¹² Note the difference in the roots of the elements compared: IE **dhē-* 'put' in the Av. cpd., **dō-* 'give' in the Skt. cpd. Skt. has also a longer form *deva-datta-* 'god-given', and from *dhē-* has *devā-hita-* 'arranged or appointed or settled by the god(s)'. With Bal. *ništa* cf. Av. *ni-šasta* (*AiW* 1087), loc. to stem *nišastay-* from **ni-śad-tei-*, which suggests that the Bal. form may show haplology.

¹³ H. C. Tolman, *Ancient Persian Lexicon and Texts* 127 s.v. (1908).

¹⁴ M. Monier-Williams, *Sanskrit-English Dictionary* 996 (1899).

¹⁵ Herodotus, *Hist.* 1.136.

¹⁶ This holds despite the fact that Zoroaster's name, *Zarathuštra-*, is taken to mean 'He whose camels are old'; but this name may reflect the prophet's years of struggle and non-success, and have been retained by him later with a feeling of pride in obstacles overcome or of defiance toward his defeated detractors. Cf. the use of the term *Quaker* for the members of the Society of Friends, now long since used by themselves with indifference to

ruler who was the first royal patron of Zarathushtra, bore the name of 'The Man of Spiritless Horses'.¹⁷

A third etymology was given by Hüsing, in 1912:¹⁸ *višta-* is a phonetically developed form of *vahišta-* 'best', superlative to *vahu-* 'good' (Skt. *vásiṣṭha-*, superl. to *vásu-* 'good'), through the steps *vahišta- vaišta- vešta- višta-*; the name then means 'whose horses are best, he of the best horses'. But the phonetics cannot be defended: older *vahišta-* is frequent in all parts of the Avesta without any such alteration, and is seen later in Mid. Pers. *vahišt* and in New Pers. *bihišt* 'Paradise'. Most important of all, the name appears repeatedly in the Gathas, the oldest part of the Avesta, and always has the form *Vištāspa-*,¹⁹ alongside frequent occurrences of adjective *vahišta-* in an unaltered form;²⁰ neither word shows any variation even in the later portion of the Avestan texts. This etymology may be unhesitatingly rejected.

A better source for *višta-* in *Vištāspa-* can, I think, be found, as participle to the Avestan verbal root *vaēs-*, exact cognate of Skt. *viś-* (IE **ueik- uik-*; the Skt. root is quoted in the zero-grade).²¹ Skt. *viś-*, pres. *viśati* and mid. *viśáte*, has the fundamental meaning 'enter'; Monier-Williams²² glosses it 'to enter, enter in or settle down on, go into, pervade,' etc. The Avestan *vaēs-* has a somewhat different development of meaning; Bartholomae²³ glosses it as 'sich bereit stellen', the semantics of which are seen in his three main fuller definitions: (1) '(antreten sva.) sich bereit stellen als —; Jemandem (Dat.) an die Hand gehen, dienen als —, (Nom.); (2) '(herantreten an — sva.) sich bereit stellen zu — (Akk.), etwas übernehmen'; (3) '(herantreten um zu — sva.) sich bereit stellen, dran, drauf aus gehen (etwas) zu (tun), es übernehmen zu —, bereit sein zu —, mit Inf.'

The verb *vaēs-* is of fairly frequent occurrence in the Avesta;²⁴ its participle, though by chance not occurring, would be *višta-* (Skt. has *viṣṭa-* in the R̥gveda and in later texts), which we have in the name *Vištāspa-*. If the prior part of *Vištāspa-* is indeed identical with *višta-* the participle of *vaēs-*, the meaning of the name is clear and appropriate; 'he whose horses have (or horse has) come in ready (for riding, etc.)'.

its original meaning. Or the first part of the name may be not from the cognate of Skt. *jarant-* 'aging', but from the Av. root *zar-* 'become angry'; the meaning is then 'He whose camels are angry or ill-tempered'. Cf. Jackson, *Zoroaster the Prophet of Ancient Iran* 14 (1899).

¹⁷ Cf. the later tradition of *Vištāspa*'s favorite black horse, miraculously cured by Zoroaster of a mysterious disabling ailment; related by Jackson, *Zoroaster* 62-4.

¹⁸ G. Hüsing, *OLZ* 15.537-41 (1912).

¹⁹ *Vištāspa-* in the Gathas: Yasna 28.7, 46.14, 51.16, 53.2.

²⁰ *vahišta-* in the Gathas: Yasna 28.8 ter. 9; 30.4; 31.1, 4, 6, 7; total number of occurrences in the Gathas, 45.

²¹ Whitney, *Roots of Sanskrit* 160-1, transcribing the root as *viç-*. The Skt. root *viś-* 'be active', which also has the participle *viṣṭá-*, is quite possibly a phonetic doublet of *viś-*, and either for that reason or because it is not found elsewhere in Iranian should not be considered as a basis for an etymology of *Vištāspa-*.

²² Monier-Williams, *Skt.-Eng. Dict.* 989, cols. 1-2.

²³ Bartholomae, *AiW* 1326-7.

²⁴ Bartholomae, *l.c.*, cites 22 passages containing the simple verb, and 7 containing its compounds.

A point of Old Iranian dialectology remains. The consonantal cluster resulting from IE k or g + t is Skt. $ṣṭ$, Av. $šṭ$, OP st :²⁵ cf. the forms already given, and to IE root $*reǵ-$ 'to direct' (Lt. *regō*, etc.) Av. adv. *rāštam* 'straight ahead', OP acc. sg. fem. *rāstam* 'straight', nt. as subst. *rāstam* 'right' (Lt. *rēctus*). The second part of the name also shows non-OP phonetics: *aspa-* is Avestan and *asa-* is OP, corresponding to Skt. *áśva-* 'horse', from Proto-IE $*ek̑wo-$. The name is therefore harmoniously Avestan in its phonology, and represents the dialect of northeastern Iran, where the first known Vištāspa, Zoroaster's royal convert and patron, dwelt.²⁶ As the name of the father of Darius it is a dialectal borrowing; for a strictly Old Persian compound of these elements would be $*vistāsa-$. As I have remarked, the name Vištāspa got prestige from its first known bearer, who accepted Zoroaster and his religion, and this accounts for the use of the name among the princes of the Achaemenian line.

Vištāspa- is accordingly best taken as a compound of the participle of Av. *vaēs-* 'to come in ready for action' and the substantive *aspa-* 'horse', and means 'The man whose horses are (or horse is) ready'.

²⁵ É. Benveniste, in his revision of A. Meillet, *Grammaire du Vieux-Perse* §125 (1931).

²⁶ Phonetic peculiarities of the Median dialect are found in the names of the Achaemenians, as is natural; and these peculiarities usually agree with those of Avestan. But while on both counts ($-šṭ-$ and $-sp-$) the name *Vištāspa-* might be Median, the historical background forbids such an interpretation.

MULTIPLE MEANING AND CHANGE OF MEANING IN ENGLISH

ROBERT J. MENNER

YALE UNIVERSITY

[Just as homonyms may conflict, so historically independent words through a series of gradual shifts in meaning tend to develop irreconcilable senses; obsolescence is thus closely connected with semantic change. Illustrations from the New English Dictionary and the Linguistic Atlas of New England.]

Many scholars have attempted to classify changes in meaning,¹ but few have written persuasively of either the fundamental causes or the processes of semantic change.² The great 19th-century linguists tried to explain already accomplished results both in the form and the meaning of words. The linguistic geographers have now taught us that neither phonetic change nor semantic change can be understood without observing the process as well as the result; but their work has modified chiefly the concept of phonetic change. One could assume that most shifts of sense in words referring to things, e.g. *car*, *hose*, *fee*, should be explained by the social historian; and that most changes of words referring to qualities, states of mind, or actions dependent on feelings, e.g. *silly*, *passion*, *to want*, might be left to the psychologist. Such an abnegation would impoverish linguistic studies. Linguistic geography has clearly shown that, however arbitrarily form may be attached to sense, sound and sense are constantly interfering with each other in unexpected ways, as in folk-etymology and in the conflict of homonyms.

In this paper I wish to discuss, not the causes of semantic change, but what I believe to be a neglected aspect of the process of change, the relation of obsolescence of meaning to multiple meaning. It is now well recognized that homonyms have mutually disturbing effects and that one of two homonyms may even disappear from a dialect because of a conflict in sense with the other.³ But if this is true of words historically distinct, it ought to be equally true of one word which in the course of time develops contradictory senses. Speakers who are not etymologists have no means of knowing that *mad* 'crazy' and *mad* 'angry' were historically one word, while *light* 'levis' and *light* 'lucidus' were historically two.⁴ Only the literate conscious of spelling realize that the two senses of [stret] 'direct' and 'narrow' represent two historically different words *straight* (OE

¹ The most comprehensive work on English is G. Stern, *Meaning and Change of Meaning* with special reference to the English language, Göteborgs Högskolas Årsskrift 38 (Göteborg, 1931).

² See Bloomfield's criticism of Paul and Wundt, *Language* 435, and his own explanation of the process, 440-3. O. Springer reviews modern work in *Probleme der Bedeutungslehre*, *Germanic Review* 13.159.

³ Bloomfield 396-8; for examples in English see now Edna R. Williams, *The Conflict of Homonyms in English*, *Yale Studies* 100 (New Haven, 1944), and for general comment my earlier article, *LANG.* 12.229 (1936).

⁴ On the two adjectives *light* see *LANG.* 12.242.

streht) and *strait* (OF *estreit*),⁵ while the several senses of *fair*, 'beautiful', 'just', and 'mediocre', are all meanings of one word. In fact, it is doubtful that most people have much consciousness of words as entities apart from context, and only a person who reflects about the use of words would be likely to wonder whether a given phonetic form represented one word or two. One might theoretically expect, therefore, that polysemy would be as disturbing a factor in speech as homophony, and perhaps even more disturbing because of its greater frequency. It is remarkable that few students of semantics have considered the two together, a notable exception being Karl Otto Erdmann, who treats the problem of 'Vieldeutigkeit' in both polysemy and homophony as exactly parallel.⁶

It might be objected that polysemy and homophony cannot be considered parallel historically because in homophony two words of originally different form converge at a given time by phonetic law, whereas in polysemy, especially in the cases to be considered here, one sense develops slowly from an earlier one. The conflict of sense is inevitable in some instances of homophony (*cattus* > *gat* : *gallus* > **gat*); but if a new sense conflicting with the old develops in a single word, one could argue that the difficulty might have been avoided by adhering to the original sense. *Funny* is now occasionally ambiguous, as a slang expression fashionable a decade ago shows: "Do *you* mean *funny* 'ha-ha' or *funny* 'peculiar'?" but if this ambiguity is embarrassing, why should speakers have used the word in the second sense at all? The superficial paradox is naturally to be explained by the fact that the extension of meaning occurs only gradually and unconsciously, *funny* being applied to situations both 'comic' and 'strange' and then by certain speakers to 'strange' situations which might amuse the speaker but seem serious enough to some of his hearers. Usually the context, the tone of the voice, the manner of expression, serve to distinguish the speaker's meaning sufficiently; but gradually as the sense is extended to wider circles and receives new applications, to persons, for example, as well as situations, there are more occasions when *funny* seems slightly ambiguous, and perhaps the word *amusing*, first recorded in the sense of 'pleasantly entertaining' in the 19th century, and now increasingly popular, is substituted for *funny* by elegant speakers. Some speakers still refrain from using *funny* in the sense of 'strange', occasionally because they are told it is wrong; but partly because their nice feeling for words keeps them from adopting a popular use which is not a necessary addition to the many synonyms for 'strange', 'peculiar', and which is not easily reconcilable with the traditional sense, supported as it is by the noun *fun*. The difficulty in the existence of the two senses arises first of all when the speaker and the hearer are not in accord in their use of the word.

It is obvious that most cases of polysemy would never produce any embarrassment in the speaker or offer any ambiguity to the hearer.⁷ The plainest case is that of metaphorical extension by what the older scholars used to call radia-

⁵ On the two adjectives *strait*, *straight* see Miss Williams 103-11.

⁶ Die Bedeutung des Wortes² 13-4 (Leipzig, 1910).

⁷ M. Bréal, *Essai de sémantique*² 157 (Paris, 1899), pointed out that the context of situation prevents misunderstanding in polysemy, but he failed to consider adequately the kind of polysemy where confusion might occur.

tion,⁸ as in the classic instance of *head*, for which one finds, in the NED, besides the literal meaning, 16 senses referring to physical things and six involving various figurative uses, all of them developing from the central sense. Here the context clearly indicates the meaning, and the speaker may sometimes be conscious of the metaphor.⁹ But when polysemy consists of the gradual development of one meaning from another, an historical dictionary often shows a kind of progression, a succession of references, several of which may, it is true, persist together for a long time, but with a distinct tendency for the earlier senses to disappear one by one, as newer extensions or developments are added. Latin *persōna*, as Greenough and Kittredge pointed out,¹⁰ is a good example of gradual extension of meaning in Classical and Medieval Latin from (1) 'mask' to (2) 'character indicated by a mask' to (3) 'character or role in a play' to (4) 'character or function one sustains in the world' to (5) (this being post-Augustan and rare) 'individual human being'. In Medieval Latin another line of development started from sense (4) and resulted in (6) 'a non-resident clergyman who has the function of a parish priest' with a later extension to (7) 'the parish priest'. In this vertical kind of development the older senses often persist beside the later; and I shall not attempt to show that there was any conflict in the various senses developed in Classical Latin *persōna*. But probably in Medieval Latin and Old French and certainly in Middle English, which borrowed OF *persone* in various senses, the limit of tolerance in divergent meanings was reached. The confusing ambiguity of Middle English *person* 'human being' and *person* 'parish priest' was resolved in English by adopting the phonetic variant *parson* (Anglo-French also has *parsonne*); whereas in French the sense 'parish priest' did not persist. In words referring to persons or things, however, it is usually dangerous to attribute the obsolescence of earlier senses to the development and spread of later ones, because the disappearance of an early meaning may be simply the result of the disappearance of the thing or kind of character in question, let us say, *persōna* 'the mask used in the theater' or *pantaloone* 'the old man in Italian comedy'. To avoid this difficulty as much as possible I have deliberately chosen to consider words, mostly adjectives, referring to qualities, characteristics, and emotions, which are not so likely to be subject to the accidents of social history.¹¹

⁸ A. Darmesteter's term was *rayonnement*, *La Vie des Mots* 73-6.

⁹ Cf. Jaberg, *Aspects de la géographie linguistique* 55 (Paris, 1935): 'La coexistence de deux significations paraît tolérable quand l'une représente le sens propre, l'autre le sens figuré d'un mot, et que ce rapport est encore sensible.'

¹⁰ *Words and their Ways in English Speech* 268 (New York, 1912). I have modified the development indicated by the authors in the light of more recent investigations; see NED s.v. *parson*, final note.

¹¹ Even 'abstract' words of this sort are subject to interference from historical shifts in mores, as Jost Trier has shown in the Middle High German words for 'wisdom' and 'intelligence', which in feudal times had social connotations which they have since lost (*Der Deutsche Wortschatz im Sinnbezirk des Verstandes*; Heidelberg, 1931). A second kind of interference, as Trier (7-10) points out, comes from the interdependence of a group of words within a given field, since a shift in one may affect the semantic limits of another. Just as the phonemicists have taught us that one cannot study the development of a particular word without considering its relations to the general pattern of sounds, so semanticists will have to beware of explaining the change of meaning in any word without considering

There are obvious limits to the usefulness of the historical materials available for such a study. My illustrations will be drawn largely from the New English Dictionary, which contains a wealth of material. But the very plan of an historical dictionary, which attempts to record from as many sources as possible the earliest and latest uses of words in their various senses, is apt to distort somewhat any picture of the historical relation of several meanings. One gains the impression that many senses of a word coexisted from the Middle Ages to the 19th century, and were used in any generation by the same people. There is scant information about the distribution of the senses according to geographical dialect.¹² When the NED does occasionally indicate that a continuing sense appears in only one dialect, or is restricted to dialects, the information may explain at once what might otherwise seem to be the coexistence of contradictory senses over a long period. Another difficulty is the lack of evidence about the social milieu or particular setting in which a given sense is used. The experience we have all had of discovering that a word has three or four meanings of which we have never heard ought to warn us against assuming that *INDIVIDUALS* in the 14th or 16th century were familiar with all the dictionary meanings recorded. On the other hand, the NED gives considerable information about the preservation of otherwise obsolete senses in phrases. The historical information of the NED may be supplemented in the case of some words by the Linguistic Atlas of New England and the English Dialect Dictionary. The information the Atlas provides is of the greatest value in the study of polysemy, not only because it records differences in dialect, but because the material is based on the speech of individual informants. The importance of the linguistic atlases for such a study has been demonstrated by Jaberg, who uses the Italian Atlas to make what he calls '*des cartes et des aires sémantiques*', in order to determine the extent of polysemy.¹³ This involves a comparison of all the maps in which the same word appears in different meanings; for example, *linda* (< Latin *limita*) means 'gutter of a roof' in one region of North Italy and 'wooden gallery' in another.¹⁴ I shall reserve for my last examples some instances in which the synchronic methods of the Linguistic Atlas of New England confirm the results obtained from the diachronically arranged materials of the NED.

II

A good illustration of the development of new senses and the gradual obsolescence of the old is the word *sad*. In presenting the evidence of this word and others schematically, I indicate on the chart (Table I) the first recorded

all the other words of similar meaning. In spite of these two kinds of interference the adjectives chosen for discussion seem to present clearer cases of the relation of obsolescence to multiple meaning than would more 'concrete' words.

¹² We shall have to wait many years for an historical dictionary that will provide information about dialects. Even the Middle English Dictionary in preparation at Michigan will not provide much information about the geographical distribution of words. For Scottish one may consult Sir William A. Craigie, *Dictionary of the Older Scottish Tongues* (Chicago, 1931 ff.), *A-Dull*; and William Grant, *Scottish Historical Dictionary* (Edinburgh, 1931 ff.), *A-Covenant*.

¹³ Aspects 43-4.

¹⁴ Aspects 44-5 and Map 3. The other studies in Chapter II are all relevant.

date of any sense not occurring in Old English and the last recorded date of any sense not prevalent today.¹⁵ OE *sæd* (= German *satt*) meant only 'satisfied', 'sated', 'full of', 'weary of', and these meanings persisted until the middle of the 15th century. In the early 14th century there had meanwhile arisen the sense 'settled', 'steadfast', 'firm', perhaps because satisfied and well-fed people are apt to be of stabler mentality than others, and the word often translates Latin *solidus*, *firmus*. Slightly later the sense 'orderly', 'regular', 'grave', 'serious' appears, applied to such people as merchants, aldermen, and professors, who are likely to be both settled and serious; and *sad* is often accompanied by such adjectives as *wise* and *discreet*. These two senses, which were not in conflict, existed side by side until the second half of the 17th century. Meanwhile there arose in Chaucer's time the sense 'sorrowful', 'mournful', 'causing sorrow', which has persisted as the chief meaning of the word *sad* to the present. Only one other sense competes with it, the more or less jocular and colloquial *sad* in *sad dog*, NED's sense 6 'deplorably bad', always sufficiently differentiated by context or phrase from sense 5. It will be observed first, that some early senses overlap later ones for long periods—but this will be true of most examples—and secondly, that though two or three senses may coexist for a long time the development out of the last of still another sense further removed from the first tends to coincide with the elimination of the first sense, whether because the first sense is becoming archaic and permits a new extension of reference, or because the development of the last sense thrusts out the first. The coincidence of senses 1 with 2 and 3 covers about a century, and even sense 5, though not in all its subdivisions, seems to overlap with sense 1. One curious feature of the subdivisions of sense 5 is that *sad* 'sorrowful' applied to looks and tones (NED's 5c) was found as early as 1386, but the editors searching for a quotation to illustrate the sense 'sorrowful' applied to persons (the most frequent application of sense 4) could find only an extremely doubtful example in Chaucer, the next quotation being of 1450. It is worth noting that the sense 'deplorably bad' begins only when senses 2-4, all referring to the virtues of firmness, strength, and orderliness, have disappeared. Two other senses of *sad*, neither familiar today, are grouped under the general head of 'various physical senses': 'solid', 'heavy', of bread, for example; and 'dark', 'deep', of color (cf. Germ. *satt*). The first, 'solid', 'heavy', very common today in English dialects,¹⁶ may have died out for several reasons,

¹⁵ The numbers on this and other charts refer to the NED's numbered definitions unless otherwise noted. No attempt is made to list all NED's definitions in every word considered. NED records all words known to have been in use since the 12th century, but gives Old English examples, if they exist, of all words included, not always recording, however, the earliest possible example in Old English, perhaps because of the paucity of good examples and the difficulty of dating some texts. In the charts I have had to consider the period 700-1000 as one, since there is not enough evidence to be sure that a sense recorded only in 1000 did not exist in 700; but I have in Table I begun the line at 700, since in *sad*, which occurs in *Beowulf*, the sense is known to be early, indicating the time of NED's first example by a vertical line. If a sense persists after 1850, the date of the last recorded instance in NED is of little significance in the earlier volumes, since publication began in 1888 and much of the material had been collected in the '70's. If the sense is still well-known I simply continue the line to 1900.

¹⁶ Joseph Wright, *English Dialect Dictionary* (EDD) (Oxford, 1898 ff.) s.v. *sad* senses 3, 4, 5.

but it is at least curious that it lasts in Standard English only as long as does the corresponding sense applied to character 'settled', 'steadfast', 'firm'. This mutual support of two senses or two closely related applications of a word to character and to objects, seems all the more possible when one looks at sense 8, in which *sad*, originally referring to 'dark', 'deep' color simply as opposed to 'light' color has been so affected by the popularity of *sad* 'sorrowful', 'mournful' as to shift to the sense 'not cheerful-looking', 'dull', 'sober'.

Another common word that has undergone a series of changes in meaning is *silly*, OE **sælig* and *gesælig*, 'happy', 'fortunate', German *selig*. The evidence is here complicated by the NED's recording the word under two separate headings *seely* and *silly*, the first the usual Middle English form and the second the form which developed in the 15th century.¹⁷ Since the two forms were not semantically differentiated, with one unimportant exception,¹⁸ and the later senses of *seely* appear in the early senses of *silly*, I have combined the two in Table II, indicating the *silly* forms by a broken line.¹⁹ The *seely*-forms actually begin only with the 13th century, but they must represent not only the unrecorded OE adjective (the adverb *seliglice* appears), but also the common OE *gesælig* which becomes early ME *iseli* and dies out in the early 13th century. The ME sense 'pious', 'holy', 'good', not found in Old English, forms the stepping-stone to the somewhat later 'innocent', 'harmless', 'helpless'. The latter sense is retained in Standard English after 1680 only in the archaic and poetic phrase 'silly sheep', now often misunderstood by readers of poetry; but the sense is still in general use in the Northern and Scottish dialects. Another Middle English sense (NED's 7) still present in Scottish dialects is 'insignificant', 'trifling', 'mean', 'feeble', although it died out at the end of the 18th century in Standard English. It will be interesting to discover, when the two Scottish historical dictionaries come to the letter S, whether the Standard English sense has persisted side by side with senses 6 and 7. It is obvious that in Standard English 'pious-good' overlapped 'innocent-harmless' and 'innocent-harmless' overlapped 'foolish-simple'; but 'pious-good' and 'foolish-simple' do not overlap historically.

Two other examples may be given more briefly: *cunning* and *wan*. *Cunning* (1) 'learned' is recorded from 1325 to 1667; (2) 'skilful', 'expert' 1382-1843 ('formerly the prevailing sense, now only a literary archaism'); (3) 'possessing keen intelligence' from 1671 on; (4) 'clever' in a bad sense from 1599 on, the prevailing sense today; (5) 'quaintly interesting or pretty' 1854 on, but recorded in the Dictionary of American English from 1843 on. In *cunning*, the bad sense (4) is triumphing over the good (3), as it has in *crafty*, although the two senses persisted side by side for several centuries.²⁰ Sense 5 arose in America about a

¹⁷ R. Jordan, *Handbuch der mittellenglischen Grammatik*² 54 §34.

¹⁸ This is NED's *silly* 3: 'unlearned, unsophisticated, simple, rustic, ignorant' (1547-1790), 3b: 'lowly', 3c: 'humble' (of things). *Seely* forms die out, it should be noted, in the first half of the 17th century.

¹⁹ NED's numbers for definitions of *silly* are in parenthesis after the numbers for *seely*.

²⁰ It is of course perfectly possible for words to have both good and bad meanings for many centuries according to circumstances. Thus *bold* (see NED's senses 1 and 4) as applied to a soldier refers to a virtue, but as applied to a child or a young woman refers to a fault. It is only when the bad sense becomes regularly more frequent than the good that the good tends to fall out of use.

TABLE II: SEELY-SILLY

	700-1000	1100	1200	1300	1400	1500	1600	1700	1800	1900
2.* happy, blissful				seely						
				1250	1482					
3. spiritually blessed				1225	1400					
4. pious, holy, good				1225	1450					
5. innocent, harmless				1290	1604					
6. deserving pity, helpless				1297	1609					
(1) <i>silly</i> -forms				1425	1680 Northern & Scottish					
7. insignificant, trifling mean, feeble				1297	1500 silly sheep					
				1297	1642					
(2) <i>silly</i> -forms				1567	1794 Scottish					
(3) <i>silly</i> : unlearned, simple, ignorant, homely				1547	1798					
8. foolish, simple				1529	1605					
(4) <i>silly</i> -forms				1576						

* NED's first definition '? observant of due season' is supported by only one definition (1200).

century ago, and it is unlikely that the ladies who apply *cunning* to pretty babies would apply it to a crafty man. *Wan* is a word most confusing to readers of medieval texts because it seems to mean almost exactly the opposite of what it means today. In Old English *wann* means 'lacking light', 'dark', and is used of night and ravens, a sense which persists until 1591. But *wan* was also used of the livid appearance of wounds and of the human face discolored by disease (700-1655), and these senses do not interfere, as their coexistence for eight centuries shows. When, however, the *wan* appearance of the sick person comes to be associated primarily and increasingly with pallor (1300 on), the old meaning 'dark', 'dusky' is ultimately felt to be incompatible with that of 'pale' and disappears.

III

I now turn to words in which several senses persist to the present time in varying degrees of frequency. *Nice* (Table III) is a word borrowed from OF *nice*, 'ignorant', 'simple', Lat. *nescius*; but most of its many senses developed in English. The NED confesses that the precise development of the senses is not clear, and is uncertain in many citations about the particular sense intended by writers in the 16th and 17th centuries. It is clear, nevertheless, that only two senses persist today: (1) 'fastidious', 'particular', 'refined', used of people and their perceptions—'a nice ear', and its counterpart applied to things perceived, 'minutely or subtly distinguished' as in 'nice shades of meaning'; and (2) the late and generalized sense of 'agreeable', NED's 15, in common use from the latter half of the 18th century. In earlier times it seems likely that the ME sense 'loose-mannered' was not easily reconcilable with the newer senses 'coy, shy' and 'fastidious, refined'; but is there any interference between the two senses listed as existing today? Proof is here impossible, but common observation shows, I think, that the vaguely approving use of *nice*, as in other words of the sort, has gradually limited the contexts in which the adjective can be used. The untutored reader of today would be puzzled or misled by Dr. Johnson's predicative use (Letter to Mr. Sastres, 1784, NED 9b): 'Your critic seems to me an exquisite Frenchman; his remarks are nice; they would almost have escaped me.' Only readers of literature, one suspects, use the older sense, though others may be familiar with it.

Happy and *fair*, if one simply set down the initial and terminal dates of various senses in the NED, would at first sight disprove my contention; but closer examination shows considerable restriction of the earlier meanings. *Happy* in its original sense of 'having good hap', 'favored by fortune', 'fortunate', apparently persists in such a phrase as 'in the happy position of being able to buy all the books he wants', though it is no longer applied to persons in this sense after the mid-18th century. In the related sense of 'propitious' as in 'many happy returns', 'happy accident' the NED notes specifically that it is used only in certain collocations in which there is association with the senses 'felicitous', 'glad'. 'Many happy returns' has certainly shifted its meaning, and the growing obsolescence of the sense 'accompanied by good fortune' is marked by the shift

to the more popular phrase 'happy birthday', which to children inevitably means the delights of ice-cream and presents on the particular birthday. 'Happy accident' is simply not understood and seems to the illiterate a grotesque contradiction.²¹ Even *happy* 'felicitous', 'appropriate', as in 'a happy phrase', is more and more limited in context and in general circulation.

A similar case is *fair*, in which the NED finds six different senses arising at different times, and all in use: (1) 'beautiful' (NED's I); (2) 'light, as opposed to dark' (NED's II); (3) 'free from blemish' (NED's III.7, 8, 9); (4) 'favorable', 'benign' (NED's IV); (5) 'free from bias' (NED's III.10); (6) expressing moderate commendation, 'pretty good', 'passable' (NED's III.11), a sense which in America at least has now shifted to 'average', 'mediocre'. A glance at the definitions, however, shows clearly that two of these, 3 and 4, are preserved only in certain phrases. 4 'favorable' is used chiefly of the weather and 3 'free from blemish or impurity' is almost wholly restricted to 'fair copy' and 'fair fame', the latter archaic; *fair* in this sense is no longer used of fruit, blank paper, or water. One guesses that *fair* in the sense of 'beautiful', although recorded into the late 19th century, is seldom used now except in poetry and ornate prose. For *fair* 'light-haired' the younger generation is substituting *blond*. The two really flourishing senses are (5) 'equitable', 'just' as in 'fair prices', 'fair play', 'no fair', which, applied to conduct, dates from Middle English; and (6) 'average', 'mediocre', which dates only from the mid-19th century,²² and became very familiar through its use in report-cards and old-fashioned grading systems. This sense may have helped to render *fair* 'beautiful' obsolete. A modern school-boy would be likely to think that Tennyson's 'three fair girls' referred to girls who were only 'so-so'. Thus the multiple references of *fair* are much reduced, if closely examined, and actual observation of the use of the word in the speech of the younger generation would, I am convinced, reduce them further.

I give finally the case of a word which has two persistent and generally familiar senses in this country, on the one hand *mad* 'insane' or 'extravagantly foolish', which dates from Old English, and on the other 'angry', which dates from 1300. The NED remarks (under sense 5) that the second sense is now only colloquial,²³ although it is the ordinary word for 'angry' in many dialects in Great Britain and America. In the earlier centuries, being *mad* 'furiously angry' was doubtless considered a mere aspect of dementia, and probably its chief characteristic (cf. *furiosus* and *furious*). In modern American usage the context often sufficiently indicates the reference: 'I'm mad at him', 'he got terribly mad', as opposed

²¹ A man of limited reading, when I remarked that something was a 'happy accident', laughed scornfully and said: 'How can an accident be happy?' *Accident* is popularly always 'an unfortunate event' and without qualification usually refers to an 'automobile accident'. Cf. below on the limitations of uneducated people in the interpretation of words like *happy*.

²² This sense of *fair* apparently developed from that of 'free from bias' (NED's 10), 'having an equal chance' (10b, 1711-), and hence between good and bad.

²³ Applied to animals in the sense 'abnormally furious', 'rabid' (NED's 6) as in *mad dog*, *mad bull*, which dates from the 16th century, *mad* is, of course, still good literary English in England.

to 'that drives me mad', 'he's completely mad'. Actually in my own usage *mad* 'demented' is not a common word, and the NED rightly points out that our modern compassion for the insane prevents us from using it as a medical or neutral term because of the tinge of contempt that has always been attached to it. In New England, as the Linguistic Atlas shows, *mad* is certainly the commonest word for 'angry', appearing first in 323 of the informants' answers, whereas *angry* appears first in only 68 (Map 472). One suspects that *mad* 'insane' is largely a 'literary' word in New England. In this instance, as in the cases of *nice*, *happy*, *fair*, the apparent coexistence of disparate senses recorded by the dictionary is found upon examination to be illusory. Decided limitations in the use of polysemantic words appear not only in individual speakers, but in whole groups of speakers.

IV

Two words in which the historical evidence of the NED may be supplemented or confirmed by that of the Linguistic Atlas of New England are *stout* and *clever* (Table IV). The only really common meaning of *stout* in Standard English today is 'fat', 'corpulent', which is not recorded until 1806. When *stout* was borrowed from OF *estout* (< MLG *stolt* = HG *stolz*), the senses already existing in Old French, 'proud', 'haughty', 'fierce', 'brave', were brought with it; but the references of ME *stout* were extended to include 'firm in resolve', 'unyielding' (NED's 4, closely related to NED's 3, 'brave'); and 'strong', 'sturdy', in a more physical sense (NED's II). The first two senses (1) 'proud' and (2) 'fierce' died out in Standard English in the 17th century; (3) and (4) persist as archaisms in set expressions: *stout soldier*, *stout heart*, *stout enemy*, *stout resistance*, though I should not myself use any of them. In English dialects Wright records the occasional persistence of (1) 'proud' and (3) 'brave', 'valiant' as well as the widespread use of II (6) 'strong of body', 'robust'; *stout* 'fat' is not recorded at all. As we should expect, in New England the word *stout* is used chiefly in two senses: first 'strong', the usual meaning in English dialects, and secondly 'fat', the euphemistic sense recorded in British English only after 1800 and then only in Standard English. Maps 458 *STOUT-PAUNCHY* and 460 *STRONG* provide excellent material for a study of the relations of the two senses. There is no geographical restriction; both are used in every large section of every state; but *stout* 'strong' is rarely recorded in cities, not being found, for example, in Boston, and *stout* 'fat' is often not recorded for out-of-the-way country districts, not being used, for example, in Nantucket (124, 125) or the Massachusetts towns of Deerfield (228) and Granville (235). Where there is a marked difference between the first and the second informant, each reporting only one sense,²⁴ the uncultured or older informant uses *stout* 'strong' and the more cultured or younger informant uses *stout* 'fat', as in Cornwall, Conn. (18), Norwich, Conn. (33), Windham, Conn. (43), Topsham-Newbury, Vt. (296). *Stout* 'fat' is thus, as one might expect, well-established in the cities, and is encroaching in country districts on the older dialect sense 'strong'.

²⁴ Informants at 18, 33, 43, 51, 62, 103, 296, 428; an exception is 10.

TABLE IV
STOUT

	1300	1400	1500	1600	1700	1800	1900
1. proud, haughty, arrogant	1315			1669		dialects
2. fierce, furious, menacing	1300			1601			
3. valiant, brave	13..				1727 arch. in stout soldier		
(d) in resistance							
4. firm in resolve, unyielding, determined				1582			stout heart stout resistance
5. strong of body	1390						stout enemy
12. thick, corpulent	1386					1842	
						1806	

CLEVER

I nimble-handed [doubtful quot. of 1200], dexterous, skillful
with brain and/or hand

II nimble, active, neat, handsome

III handy, neat, agreeable, 'nice'

(c) good-natured

	1580						
		1674	1735	dialects			
		1715	1883	dialects			
						1773	

For the sense 'fat-paunchy' (Map 458), the most frequent responses (suggested responses not being considered) are *stout* (189), *pursy* (132), *fleshy* (102), *fat* (78: not recorded on the map but listed in the commentary). Various other responses of which I have not counted the frequency are: *stout-built*, *corpulent*, *portly*, *heavy*, *pudgy*, *tubby*, *bloated*, and *pot-bellied*. For the sense 'strong', the commonest response after *strong* itself is *stout* (155) followed by *husky*, *rugged*, *powerful*, and other words. Thus *stout* 'fat' occurs spontaneously 189 times, *stout* 'strong' 155; 78 of these informants mention *stout* in both senses. The first response of 105 informants is *stout* for 'fat', of 64 informants *stout* for 'strong'. Of these, 13 are the same informants, each answering *stout* first in each sense.²⁵ This number, I submit, is a small one, and shows that the two senses of *stout* are interfering. The encroachment of the new or standard euphemism *stout* 'fat' on the old persistent dialect use of *stout* 'strong' often results in the choice of one of the senses only, and sometimes in the restriction of *stout* 'fat' to a particular case. Two informants (314.2 and 368.1), both of whom use *stout* 'strong', definitely state that *stout* 'fat' is used of women only; and two others (26.2 and 80.3), both of whom mentioned *stout* 'fat', the second by suggestion only, avoid *stout* 'strong' applied to a person, remarking that it is used of objects only. One person (106.1) actually speaks of the two senses, saying that 'stout can mean either strong or thick-set; that's what makes our language so hard for foreigners.' It might be argued that 13 instances out of a possible 64 in which *stout* occurs to informants first in both senses do not constitute a significantly small number, since it might be as large a number as should be expected on maps where many synonymous words are given and there is an element of chance in which is mentioned first. In order to test this I have taken the two other words for 'fat' which are most frequently recorded, *pursy* and *fleshy*, and compared the number of times each appears. In the case of *stout* 'fat' the 13 instances where the informants also give *stout* 'strong' first are 12.3% of the total number (105) who cite *stout* 'fat' first; *pursy* is cited first by the same informants who cite *stout* 'strong' first, in 12 cases out of 59 or 20.3%; and *fleshy* is cited first by the same informants who cite *stout* 'strong' first in 23 cases out of 103 or 22.3%. Similarly the total number of those who cite both *stout* 'fat' and *stout* 'strong', though large (78), is a smaller percentage, 41.2%, of the total citing *stout* 'fat' (189) than is the total number of those citing both *pursy* 'fat' and *stout* 'strong', 80 or 66.6% of 132 citing *pursy* 'fat', and than that of the total citing both *fleshy* 'fat' and *stout* 'strong', 71 or 64.5%, of 110 citing *fleshy* 'fat'. The two sets of comparative figures seem to show that there is a distinct tendency in individuals to avoid both senses of *stout*. One cannot expect in this word an absolute rejection of one sense in favor of another. The Atlas enables us to catch the conflict of the two senses in the very process of development; for there is no doubt, even apart from the historical evidence, that *stout* 'strong' is the older term and *stout* 'fat' the newer in districts where both are used. Besides what has already been said of older or less cultured informants using *stout* 'strong', one may note

²⁵ 8, 48.2, 212.1, 2, 239, 281.2, 284.1, 324.2, 333.2, 362, 407.1, 412.2, 416.1.

that two informants remark that *stout* 'strong' is older (346.2, 392.2), while twelve say the use of *stout* in the sense of 'corpulent' is modern.²⁶

Another adjective in which dialect and standard senses conflict is *clever*. Here the historical evidence is of little value because *clever* was 'apparently in local and colloquial use long before it became a general literary word' (NED),²⁷ because it is still a dialect word with several senses both in England and this country, and because it has never established itself in Standard English except in the sense that persists today, 'skillful with brain or hand'. According to the reasonable guesses of the NED the word meant first, 'expert or nimble with claw or hands', out of which grew the meaning 'skillful' and also in dialect and colloquial English the more general senses 'nimble', 'active', 'lithe', 'handsome' (NED's II.4, 5). A still vaguer sense practically equivalent to modern 'nice' (NED's III.8a, b) is common in the 18th century, and another developing out of this (or out of the sense 'handy to use', 'capable of being handled', NED's III.7) is 'good-natured', 'amiable', which is now restricted to English and American dialects. The sense 'skillful with hands', 'handy' is recorded on Map 462 HANDY (AT PLOUGHING) of the Atlas, and 'good-natured' on Map 468 GOOD-NATURED. The range of applications of *clever* in New England is considerable, and it is especially noteworthy that though *clever* may mean simply 'good-natured', it often means 'good-natured but stupid or clumsy', and even 'ignorant' and 'stupid',²⁸ senses which are not easily reconciled with 'skillful', 'handy'. The editors of the Atlas discuss the use of the two senses of *clever* in their valuable comment on 'good-natured' (Map 468), noting that "the word is not uncommonly used by the same informant as an equivalent of both 'good-natured' and 'handy', apparently without any confusion of the two senses in particular situations." Their comparison of the two maps shows that 57 informants use *clever* in both senses, of whom 26 had one or the other suggested by the field worker. The 57 informants citing both senses represent about a third of the total number (31.8%) citing *clever* 'good-natured' (176) and nearly a half (45.2%) of the total number citing *clever* 'handy' (126); but the 31 who cite both senses without suggestion represent only a fourth (25.2%) of the total number citing *clever* 'good-natured' without suggestion (123), and a third (32.9%) of the total number citing *clever* 'handy' without suggestion (94); while the 26 who cite with suggestion for both words represent 49% of the total citing *clever* 'good-natured' with suggestion (53), and 78.7% of the total citing *clever* 'handy' with

²⁶ 122.2, 202.1, 257, 259, 290, 310.2, 390.1, 2, 391.2, 403 (only during the last twenty years), 404, 408.1. See the commentary, Map 458.

²⁷ The word was recorded without definition by Sir Thomas Browne before 1682 (Tract VIII), as characteristic of Norfolk and East Anglia.

²⁸ 'Clever may mean (a) good-natured; (b) good-natured but stupid, weak-willed, or clumsy; (c) good-natured but shiftless and irresponsible; (d) foolishly obliging, so good-natured as to be at the mercy of others; (e) gullible or spineless; (f) ignorant; (g) stupid, brainless; (h) foolish but harmless; (i) indolent, shiftless or worthless. . . . Clever in senses (a) to (d) has been entered on the map; when recorded in other senses it is given in the commentary.' Commentary on Map 468 GOOD-NATURED.

suggestion (33).²⁹ The discrepancy between the percentages of the suggested and unsuggested responses seems to me to show clearly that there is interference between the two senses. The spontaneous responses show much less use of *clever* in two senses than the SUGGESTED responses; many informants are familiar with the two senses, but fewer individuals use the word readily in the two senses. *Clever* 'skillful' is a literary word in country districts. It is obvious from the comment on the two words that *clever* 'handy', said to be modern by nine informants, is the newer sense in the country, where it is gradually replacing the old dialect sense of 'good-natured', said to be older but still in use by four informants.³⁰ One informant (32.2 New London) remarks that *clever* formerly meant 'good-natured but weak-willed' and now means 'skillful', a second (152.2 Weston, Mass.) that *clever* of persons means skillful, of animals, gentle; and a third (272.2 Northfield, Vt.) that *clever* is now used only of horses, but was formerly used of persons. Nine informants restrict its application to animals.³¹ The most interesting comment of all is that of informant 268.1 (Windsor, Vt.), who says that *clever* means 'handy' only when qualified by a phrase like 'at ploughing'; alone it means 'good-natured but foolish'. It is actually this use with the prepositional phrase, one suspects, that in other instances makes it possible for the same person to continue to use the word in two very different senses. In such phrases as 'clever at ploughing', 'clever at carpentering', it is unambiguous; as a simple modifier or predicate, 'a clever man', 'he is clever', its ambiguity is disturbing in the New England country districts.

V

In such words as *stout* and *clever* country people show pertinacity in adhering to traditional senses in spite of interference from those imported from Standard English. Among city-dwellers there is a different kind of conservatism. Readers of old literature, especially writers and scholars, are often perfectly familiar with senses of words that are unknown to the younger generation, and especially to boys and girls with no family tradition of literary culture. Some earlier senses of *happy*, *nice*, and *fair* have already been mentioned as obsolete or obsolescent in the speech of young people. Our own familiarity as scholars and readers with the many meanings of the same phonetic forms must not blind us to the restrictions on polysemy that arise from the cultural limitations of the uned-

²⁹ In Maine, where the field-worker (Lowman) resorted to suggestion freely, 70% or 17 out of 24 informants who gave suggested responses reported both senses, but of the 53 informants to whom no suggestion of either sense was made, only 6 or 11% report both senses.

³⁰ Unlike the case of *stout*, where the historically newer sense penetrates dialect from Standard English, the historically older sense of *clever*, i.e. 'skillful', is replacing a newer sense that developed in East Anglian dialects and was brought thence to New England. This should teach historical scholars to beware of concluding that a new sense encroaching upon an old in any given period is necessarily a development of the old. The facts of lost antecedent history might, if recovered, show that the apparently new sense was really older historically than the one it is replacing, but merely happens to be newer in the particular locality where it is preserved.

³¹ Map 468 GOOD-NATURED, commentary: 146.1, 160.1, 2, 266.2, 356, 374, 376.2, 377.2, 396.2; cf. 272.2.

ucated. It is true that in slang and the loose application of old words in colloquial speech young and crude people often seem to make words refer rather indiscriminately to many different things and situations; but in one way this very tendency to multiple reference interferes with the traditional references of words. As a student of vulgar English I am constantly struck with the inability of the uneducated to understand the ordinary historical senses of words in common use among the literate, and every teacher must have had similar experiences. The very popularity of a word prevents the use of it in older historical senses. The younger generation's indiscriminate application of *pathetic* to 'pitiful' or 'pitifully wretched' people makes it harder to use the word of the tender emotions in a wider sense, just as this respectable and traditional sense, 'affecting', made Ruskin's *Pathetic Fallacy* 'fallacy induced by the passions or emotions' rather obscure even to the literate.

The interference of a new meaning with an older one is very marked in words referring to death or sex, but the process is the same, the only difference being that the association of a word with TABU subjects intensifies the process.³² A well-known historical instance is *undertaker* 'manager of funerals', which has ousted the earlier senses of 'contractor' or 'literary entrepreneur'. Today *immoral* and *passionate* can hardly be used in their traditional senses because of the popular association of the words with sex. Westbrook Pegler finds it necessary to explain elaborately that when he writes of the *immorality* of certain labor leaders he is not necessarily referring to sexual orgies. *Passion* and *passionate* are liable to misunderstanding and mean simply *lust* and *lustful* to many young people.³³ In such words we have a very definite evidence that the popular use gradually restricts the more learned.³⁴ It helps us to understand the process of obsolescence in other words. Mere fashion, of course, plays a part; but it has been the object of this paper to show that ambiguity resulting from the coexistence of several senses is a factor in obsolescence. The younger generation using words in newer senses unconsciously avoids using them in older and different ones. Even the older generation will gradually use words less often in senses that may not be understood by the younger. Literate people find themselves inhibited by the illiterate from continuing to address them in traditional terms that may be misapprehended. The slow process of obsolescence is thus begun. Old senses are imperiled by the new, and the further the new sense

³² Cf. the similar situation in homonyms, Bloomfield, *Language* 396; and my comment *LANG.* 12.231.

³³ A pious Irish fellow was very much embarrassed when asked in my hearing by a man reading a newspaper what the 'Passion of Our Lord' meant. It is curious that the NED in 1909 labelled *passionate* 'affected by the passion of love' obsolete (sense 4). An earlier example of the same process is *lewd*, originally 'lay' as opposed to 'clerical', then 'unlearned', 'common', 'vulgar', 'lascivious', the last of which ousted all other senses after 1700.

³⁴ TABU may of course restrict the use of older senses among the learned as well as among the uneducated. An extreme instance is *pervert*, noun, which in reference to sexual abnormality was not yet cited in NED's 1909 volume, the Supplement's first instance being dated 1906. The rapid spread of the psychologist's term put a sudden stop to the old use of the word in the sense of 'apostate', and a modern Dean Farrar could not refer to St. Paul as 'that audacious pervert' (NED's last quotation, 1879).

shifts from the older one, unless the contexts of the two senses are regularly different,³⁵ the less likely is the old sense to persist by the side of the new.

³⁵ Some representatives of the Prague School believe that English and other analytical languages differ from Czech and the Slavic languages generally in making the sense of a word depend upon its context, and find in this tendency an explanation of the fact that English avoids homophony less than other languages. See B. Trnka, *Bemerkungen zur Homonymie*, *Travaux du Cercle Linguistique de Prague* 4.154, and V. Mathesius, *Travaux* 1.84. This principle would apply to polysemy as well as to homophony; but I suspect that these scholars underestimate the conflicts of homophony in English and exaggerate the differences between English and Czech in this respect.

THE REDUCTION OF INITIAL *kn* AND *gn* IN ENGLISH

HELGE KÖKERITZ

YALE UNIVERSITY

[A reconsideration of the available orthographic and orthoepistic evidence and a new explanation of how *k* and *g* disappeared from the initial groups *kn* and *gn*.]

Today *k* and *g* are mute in the initial consonantal groups *kn* and *gn*, which were fully pronounced throughout the OE and ME periods. The process of reduction, which began in early NE and eventually led to the coalescence of *kn* and *gn* with simple initial *n*, can be followed, in its broad features at least, in the available orthographic and orthoepistic evidence. Its phonetic interpretation is less easy on account of the conflicting statements of 17th- and 18th-century grammarians, their lack of phonetic insight, and their annoying practice of frequently copying from one another without any indication of the source. Moreover, a modern investigator of the problem feels keenly the absence of trustworthy analyses of the sound or sounds allegedly used for initial *kn* within living memory when Ellis and his helpers were mapping out the dialects of England and Scotland.

Their work was done mainly in the sixties and seventies. At that time, the penultimate stage in the reduction of initial *kn* to *n* seems to have lingered on in certain local dialects of Cumberland, Westmoreland, and adjacent areas. Ellis records [nh], his symbol for the voiceless *n*, from Long Sleddale, Temple Sowerby, and Milburn in Westmoreland; Muker, Hawes, Dent, Sedberg, Burton-in-Lonsdale, Chapel-le-dale, and Horton-in-Upper-Ribblesdale in the extreme west of Yorkshire; and, interchanging with [tnh], from Langwathby in Cumberland.¹ In most of these districts [nh] seems to have been the current sound for *kn*, though it was apparently obsolescent in Milburn and obsolete in Langwathby. The variant [tnh] is particularly dubious, having been obtained only from Miss Mary Powley, the Cumberland poetess, and her sister Mrs. Atkinson, who both maintained that this was the common sound about 1820-30.² The two ladies were not very successful in imitating the sound: J. G. Goodchild, Ellis's chief helper, wrote [nhAA] for *know* from Mrs. Atkinson's dictation, adding a note to the effect that [tnhAA] 'was perhaps more exactly Mrs. A.'s pron.';³ in a similar note to Miss Powley's pronunciation we are told that [tnhoo], usually dictated for [nhoo], was 'merely an emphatic utterance of [nhoo].'⁴ The unreliability of this second-hand analysis of *kn* as [tnh] becomes even more apparent from Ellis's comment on Rev. T. Ellwood's pronunciation: '*know*, Mr. E. considered it was [tnoo], but, as I heard him, he said simply [noo].'⁵ If Ellwood, who had been acquainted with the dialect of Abbey Holme in Cumberland all

¹ A. Ellis, *On Early English Pronunciation*, 5.542-636.

² *Ibid.* 561.

³ *Ibid.* 599.

⁴ *Ibid.* 600.

⁵ *Ibid.* 601.

his life, could be so mistaken as to the nature of the sound he used, how are we possibly to trust similar assertions from local informants in Lorton and Penrith, Cumberland, who, forty or fifty years later, remembered having heard *tn* for *kn* in their childhood?⁶ What they analyzed as *tn* may well have been a combination of voiceless and voiced *n*, that is [ɲn]. Of course, *tn* may once have been the intermediate stage between *kn* and [ɲn] (see below), remaining perhaps the traditional sound among dialect imitators long after its change to [ɲn] or [n]. Yet from personal experience I know how easy it is for such imitators, even those accustomed to the dialect from childhood, to exaggerate, consciously or unconsciously, the peculiarities of the vernacular pronunciation.⁷ Having once erroneously analyzed *kn* as *tn*, they would, I am sure, religiously insert a *t* with nasal plosion before the *n* whenever discussing the characteristics of their dialect with an outsider or reciting some piece of rustic humor.

From the material supplied by Ellis it is clear, however, that some kind of voiceless *n*, probably [ɲn] and not the fully voiceless sound which Ellis writes [nh], was current in a few northwestern dialects down to the last quarter of the 19th century. There is no safe evidence of a simultaneous or earlier existence of [tn] or [tɲ] in any of these dialects. It is strange, therefore, to find no mention whatever of the voiceless *n* in Wright's English Dialect Grammar, but instead the obviously inaccurate statement (§335): 'A generation ago this *tn* was also common in the dialects of Cum. and Wm. but it is now quite obsolete.'

The situation is somewhat different in Scotland. Here, according to Wright,⁸ *k* has disappeared before *n* in the speech of the younger generation except in the dialects of the Shetland and Orkney Islands and in northeastern Scotland, although it was preserved in all Scotch dialects in the early part of the last century; '*tn* from older *kn* is still used by old people in w.Frf. e.Per.' Modern manuals of Scotch dialects agree on the whole with Wright. Mutschmann⁹ says that in the northeastern Scotch dialects *k* is still pronounced before initial *n*, though it is rapidly vanishing through the influence of StE, and that *g* may still occasionally be heard in *gnaw*. In the southern dialects *k* had disappeared earlier, for in 1873 Murray reports that it was pronounced before *n* only by old people;¹⁰ in Roxburghshire it was pronounced 'until within living memory', except in north Roxburghshire, where there is definite evidence of its non-pronunciation before 1805.¹¹ According to Grant-Dixon,¹² 'the pronunciation of *k* before *n* is still to be heard in the North-East, but it is practically obsolete in the Mid. districts;' *g* is said to be rarely pronounced before *n* except in *gnaw*.¹³ In the Buchan dialect Dieth¹⁴ had heard *k* in *knife* and *knee*, and he gives *gnaw*

⁶ B. Brilioth, A Grammar of the Dialect of Lorton (Cumberland) §338; P. H. Reaney, A Grammar of the Dialect of Penrith (Cumberland) §419.

⁷ For a typical instance of this tendency see H. Kökeritz, The Suffolk Dialect §94.

⁸ J. Wright, The English Dialect Grammar §335.

⁹ H. Mutschmann, A Phonology of the north-eastern Scotch Dialect §§212, 216.

¹⁰ J. Murray, The Dialect of the Southern Counties of Scotland 122.

¹¹ G. Watson, The Roxburghshire Word-book 9.

¹² W. Grant & J. M. Dixon, Manual of Modern Scots §36.

¹³ Ibid. §43.

¹⁴ E. Dieth, A Grammar of the Buchan Dialect 91, 116, 126, 194.

as both [nja:v] and [gnja:v]. From Perthshire Sir James Wilson reports¹⁵ the use of *tn* for *kn* in *knoll*, *knee*, *knife*, adding that the consonant sound 'is between *t* and *k*, but nearer *t* than *k*'. The Shetland dialect sound is analysed as [ʃŋ] by Grant-Dixon;¹⁶ whether it is the only sound for *kn* in the Shetland Islands or whether there are local variants, is not specifically stated. At any rate, to a non-phonetician the sound-combination [ʃŋ] generally gives the impression of *sn*, and as such it was analysed by Marwick about twenty years ago. He had come across an occasional *sn* for *kn* in Orkney Norn, where otherwise *k* before *n* is 'always preserved by the older generation', and he mentions this change of *kn* to *sn* as being common in Shetland Norn.¹⁷ Jakob Jakobsen, the great authority on the vocabulary of Shetland Norn, must have found it difficult to analyze the sounds used for initial *kn* and *sn*, which seem to have coalesced in that dialect. Not only does he mention the sporadic use of *sn* for *kn*,¹⁸ but he records no less than six other sound-combinations for *kn*, viz. [kn], [kŋ], [kɲ], [kʃ], and, to use his own symbols, *hn* and *hɲ*;¹⁹ these unphonetic notations *sn*, *hn* and *hɲ* should probably be interpreted as [ɲn] or [ʃŋ].

The disappearance of *k* and *g* from the initial groups *kn* and *gn* is not of recent date, however, even though vestiges of what was once *k* have remained in isolated English dialects until within living memory. Phonetic spellings reveal that in certain regional or class dialects *k* had ceased to be pronounced in initial *kn* during the latter half of the 15th century. In the Cely and Stonor Letters we find *now* (know) 1475, *no* (know) 1476, and in the Verney correspondence *now* (know) and *nott* (knot) 1651;²⁰ Matthews cites *nowingly* and *knaw'd* (gnawed) from Verney Letters of the Eighteenth Century.²¹ In late-17th-century log-books Matthews has, besides, come across *knnothing* 1693, *knowthing* (nothing) 1694, *knoe* (no) 1694, *noe* (know) 1680, *nock* (knock) 1694, *knight* (night) 1695, *knoune* (noon) 1695, *afterknnon*, *forknnon* 1695.²² From the volumes of the English Place-Name Society I have collected the following spellings: *Notingbarns* 1519, *Nuttyngbarnes* 1543, 1550, *Notyngghyll* 1550, *Nuttyng Woode* 1550 for Notting Hill and Barns (< OE **Cnottingas*), *Knephill*, *Nephilhawe* 1548 for Knaphill (< OE *cnæpp*), *Nighllins* 1578 for Knightlands Fm, *Nites* 1617 for Knight's Fm, *Knott Green* 1676, *Nottle Lane* 1687 for Notley Green, *Nell* 1724 for Knelle (< OE **cnyll*), *Nelstone* 1724 for Knellstone, *Napp* 1660 for Knapp Down (< OE *cnæpp*), and *Noyle* 1693 for Knoyle (< OE *æt Cnugel*).²³

The first shorthand authors to admit the non-pronunciation of *k* in *kn* are Dix

¹⁵ J. Wilson, *Lowland Scotch*, etc. 21, 25 30.

¹⁶ Op.cit. §55.

¹⁷ H. Marwick, *The Orkney Norn* xlv, 172.

¹⁸ J. Jakobsen, *An Etymological Dictionary of the Norn Language in Shetland* liv.

¹⁹ Ibid. 439 ff.

²⁰ R. E. Zachrisson, *The English Pronunciation at Shakespeare's Time as Taught by William Bullokar* 108.

²¹ RES 12.184.

²² Anglia 59.239.

²³ The Place-Names of Middlesex 129 f., of Surrey 158, of Essex 143, 352, of Hertfordshire 166, of Sussex 517, of Wiltshire 206, 175.

(1640), who writes *new* (knew) and *no* (know), and Everardt (1658), who says that *k* may be omitted in *knockes*, *knott*, *knotty*.²⁴

Shakespeare has several puns which clearly show which way the wind was blowing: *nights* ~ *knights* in Henry IV A, 1.2.28, *nave* ~ *knave* in Henry IV B, 2.4.278, *none* ~ *known* in Much Ado 4.2.26-34, and perhaps also *not* ~ *knot* All's Well 3.2.24, 4.5.19. I feel more and more convinced that Juliet is quibbling on *night* and *knight* in her monologue in 3.2.1-31.

The early grammarians are comparatively slow in admitting the non-pronunciation of *k* and *g* in initial *kn* and *gn*. From the Survey of the orthoepistic evidence given below, it will be seen that in the 17th and 18th centuries a few writers still maintain that *k* and *g* should be fully sounded in *kn* and *gn*; others say that the current sounds are *tn* and *dn* respectively; others again analyze both *kn* and *gn* as *hn*—that is, some kind of voiceless *n*; whereas the majority, particularly from 1700 on, insist that *kn* and *gn* had been reduced to *n*. For an understanding of this Survey it should be noted that it includes only the first edition of a grammar which discusses *kn* and *gn*, unless a subsequent edition contains deviating rules for their pronunciation; that when two dates are given, the second (in parentheses) indicates the edition actually used; and that under the heading *hn* have been grouped all those authorities who report the use of some form of aspiration instead of *k* or *g*, and under (*k*)*n*, (*g*)*n* those whose statements imply only some unspecified kind of reduction. A separate group has been provided for the few grammarians who equate *gn* and *kn*.

SURVEY OF THE ORTHOEPISTIC EVIDENCE

1. KN:

- kn*: 1547 Salesbury, 1568 Smith, 1580 Bullokar, (1602 Willis), 1621 Gill, 1622 Mason, 1679 Gerner, 1701 Jones (also *n*).
- (*k*)*n*: 1685 Miede, 1702 Boyer, 1704 Right Spelling, 1726 Tuite.
- tn*: 1672 Festeau, 1679 Mauger (*knowledge* = *ténoledge*), 1693 Nicolai, 1701 Pleunus, 1705 Tiessen, 1705 Ludwig, 1705 Sewel, 1711 Beuthner, 1712 Hassen, 1712 Maittaire, 1726 Ludwig (*tn* or *dn*), 1738 Brommenhaer, 1744 Kullin (*tn* or *dn*), 1748 König, 1764 Prager (but *knowledge* = *nalledsch*).
- dn*: 1687 Offelen, 1706 König, 1718 Arnold, 1726 Ludwig (*tn* or *dn*), 1744 Kullin (*tn* or *dn*), 1765 Schade, 1794 Pistorius ('almost *dn*').
- hn*: 1640 Daines, 1685 Cooper, 1700 Brown, 1714 (1721) Brightland, 1721 Watts, 1725 Lediard, 1728 Arnold, 1750 Bertram (also *n*), 1751 Tiffin (also *n*), 1757 Serenius (also *n*), 1794 Pistorius.
- n*: 1640 Dix, 1658 Everardt, 1672 Steel, 1685 Mauger, 1695 Writing Scholar's Companion, 1698 Nyborg, 1701 Jones (also *kn*), 1701 White, 1704 Expert Orthographist, 1709 (1771) Dyche, 1715 König, 1721 Watts (also *hn*), 1724 Baker, 1727 Weston, 1728 Miede, 1735 Pell, 1735 (1739) Loughton, 1737 Saxon, 1740 Flint, 1740 (1781) Dilworth, 1741 Serenius (also *hn*), 1748 Kraak, 1750 Bertram (also *hn*), 1750 Annet, 1751 Tiffin (also *hn*), 1753 Bachmair, 1756 Der getreue Dolmetscher, 1756 Peyton, 1758 Smith,

²⁴ W. Matthews, English Pronunciation and Shorthand in the Early Modern Period 184 f.

1762 Menezes, 1765 Elphinston, 1766 Buchanan, 1766 Holdsworth & Aldridge, 1767 Sharp, 1768 Franklin, 1780 Sheridan, 1782 Onnen, 1784 Nares, 1784 Moriz, 1791 Walker, 1792 Ebers, 1796 Siret-Parquet, 1799 Murray, 1799 Christiani.

2. GN:

- gn*: 1602 Willis (but *gnibble* = *nibble*), 1717 Ludwig, 1764 Prager.
 (*g*)*n*: 1640 Daines.
dn: 1705 Sewel, 1738 Brommenhaer (also *n*), 1758 Smith.
hn: 1700 Brown, 1721 Watts, 1725 Lediard, 1750 Bertram ('gentle aspiration'), 1762 Arnold, 1792 Ebers ('aspiration'), 1794 Pistorius ('aspiration'), 1799 Christiani ('aspiration').
n: 1674 Coles, 1676 Strong, 1685 Cooper, 1688 Osborn, 1695 Writing Scholar's Companion, 1701 Jones, 1709 (1771) Dyche, 1724 Baker, 1726 Tuite, 1727 Weston, 1735 (1739) Loughton, 1735 Pell, 1737 Saxon, 1738 Brommenhaer (also *dn*), 1740 Flint, 1740 (1781) Dilworth, 1748 König, 1753 Bachmair, 1756 Peyton, 1766 Buchanan, 1767 Sharp, 1780 Sheridan, 1784 Nares, 1791 Entick-Reichel, 1791 Walker, 1796 Siret-Parquet, 1799 Murray.

3. GN = KN:

gn = *kn*: 1580 Bullokar, 1596 Coote (in dialectal or vulgar speech), 1633 Butler, 1644 Hodges, 1685 Podensteiner.

The traditional or orthodox way of explaining the reduction of initial *kn* and *gn* to *n* is to assume a process of regressive assimilation whereby the alveolar nasal *n* caused *k* and *g* to abandon their velar articulation for an alveolar one, thus changing them into *t* and *d* respectively; later *t* and *d* were absorbed by the following *n*, or, to express it phonetically, these alveolar consonants with nasal plosion were eventually, through regressive assimilation from the alveolar nasal *n*, deprived of their nasal plosion and reduced to the simple alveolar nasal consonant *n*. However, there is some disagreement concerning the intervening stages of the process. Sweet²⁵ assumes a developemnt [kn] > [ŋ] > [n], Horn²⁶ [kn] > [tn] > [tŋ] > [ŋ] > [n], Jespersen²⁷ either [kŋ] > [tŋ] > [ŋ] > [n] or, like Sweet, more directly [kŋ] > [ŋ] > [n], Viëtor²⁸ [kn] > [tn] > [dn] > [n], and Passy²⁹ five parallel stages: [kn] > [kŋ] > [tŋ] > [ŋ] > [n]; [gn] > [gŋ] > [dŋ] > [n] > [n]. One may rightly ask why five stages should be necessary in changing *gn* to *n* according to Passy, when three would do the trick. Again, this strict parallelism in the development of *kn* and *gn* is artificial and not compatible with the orthoepistic evidence.

²⁵ H. Sweet, *History of English Sounds* §924.

²⁶ W. Horn, *Historische neuenglische Grammatik* §242.

²⁷ O. Jespersen, *A Modern English Grammar* §12.71.

²⁸ W. Viëtor, *Elemente der Phonetik des Deutschen, Englischen und Französischen* §107, Anm. 3.

²⁹ P. E. Passy, *Étude sur les changements phonétiques* 263.

As I have pointed out elsewhere,³⁰ the question of parallelism is indeed of small importance compared with establishing the most likely phonetic process that changed *kn* and *gn* into *n*. While theoretically unassailable, the above series of changes cannot be reconciled with the evidence of a great many of our authorities, nor with similar reductions of *kn* and *gn* actually in progress in other languages. For one thing, all these theories (with the exception of Sweet's) make use of the intermediate stages *tn* and *dn*; but was it really necessary for *k* to become *t* and for *g* to become *d* before their final disappearance from the scene? Again, why should *n* have to become fully unvoiced in the reduction of *kn* to *n*? The answer to both these questions is that neither *t* (*d*) nor [ŋ] is essential. Other changes can easily be suggested, changes that are phonetically as sound as the orthodox ones but more compatible with the historical material under consideration and at the same time well evidenced from certain Swedish dialects and from Shetland Norn.

The Survey above reveals the interesting and significant fact that only foreign grammarians report the intermediate stages *tn* and *dn*; Maittaire (1712) is a seeming exception, but his rule is obviously modelled on Festeau's. The earliest of these foreign grammarians is Festeau (1672), a French teacher from Blois residing in London, who, however, never says that *k* became *t*, merely that it was pronounced 'approchant du *t*' in *know*, *knife*, *knee*.³¹ His words are echoed in Offelen (1687), who transcribes *know*, *knife*, *knee* [dnoo, dneif, dniɪ], adding, 'D. muss nicht viel gehört werden';³² in Nicolai (1693), who says: 'Si verò *n* statim sequitur, feré ut *t*, ut *know*, *knife*, *knee*';³³ and by Pleunus (1701), who transcribes *know*, *knife*, *knee* [tno, tnaife, tni], saying that *k* 'avanti *N*. fa appresso a poco *T*', i.e. had become approximately *t*.³⁴ From the Germans Offelen and Nicolai one direct route leads to the German grammarians of the 18th century (except Lediard and some later orthoepists),³⁵ who in their turn influenced the Swede Kullin (1744);³⁶ and another route to the Dutchman Sewel (1705) and from him to Brommenhaer (1738) and Smith (1758). Thus in spite of Hempl's

³⁰ Mather Flint on Early Eighteenth-Century English Pronunciation 145-152, of which the rest of this article is essentially a reprint.

³¹ T. Spira, *Die englische Lautentwicklung nach französischen Grammatiker-Zeugnissen* §271.

³² *Englische Studien* 10.364.

³³ *MLN* 7.151.

³⁴ A. Pleunus, *Nova, et Perfetta Grammatica Inglese* 22.

³⁵ Podenstein (1685) seems to be independent, at least as far as *kn* is concerned. Bonhardt (*Phonetische Studien* 2.65 f.) stresses the dependence of König, Arnold, and Greiffenhahn on Mauger-Festeau, and Driedger (*Johann Königs [John King's] deutsch-englische Grammatiken und ihre späteren Bearbeitungen* 15 ff., 23 f.) gives excellent material to illustrate the complete dependence of König on Mauger-Festeau and Miede; he also emphasizes Ludwig's indebtedness to Offelen. But Viëtor, who excerpted Offelen (*Englische Studien* 10.361 ff.), was unable to trace the source of his statements, although he was aware of the close agreement between Offelen and Nicolai. It is clear that Offelen was familiar with Festeau's book. He lived in London, where he taught English to Germans and German to the English, as well as French, Spanish, and Italian. Like Festeau (cf. Spira, op.cit. §234), Offelen teaches, for instance, *o* in *come*, *won*, *some*, *monk*, *pomp*, *whom*.

³⁶ *Studier i modern Språkvetenskap* 6.38.

criticism of Sweet,³⁷ mentioned approvingly by Horn,³⁸ there is good reason for Sweet's remark:³⁹ 'The *tn* of the Germans was, no doubt, only a clumsy way of indicating the voiceless *n*.' Had Sweet known the ultimate source of this *tn*, he would probably have added: 'due to the influence of Offelen, Nicolai, and Festeau.' Those who are inclined to trust Festeau's analysis of *kn* should not forget, however, that it is the same Festeau who teaches his pupils to pronounce English *th* as French *s* and *z*,⁴⁰ as does Offelen. It must be admitted, I think, that the orthoepistic evidence for *tn* is very flimsy.

Now it is quite possible that, in spite of unsatisfactory evidence, the first stage in the development of *kn* to *n* was *tn* (the precise quality of the *n* is of no concern at the moment), at least in certain local dialects. A change of *kn* to *tn* and of *gn* to *dn* would parallel the well-known development of initial [kl] and [gl] into [tl] and [dl] respectively, as in *clean* ~ *tlean*, *glass* ~ *dlass*, which is actually taught by some of the early grammarians and is still a feature of many dialects;⁴¹ yet this is not a complete parallel, because, as will be shown below, the assimilatory change of *k* in *kn* and of *g* in *gn* need not at all result in the formation of *t* and *d*. Nor is *Twit'nam* for *Twickenham* a valid parallel,⁴² since its original [kn] is not initial. Festeau, about whose antecedents in England we know next to nothing, may have picked up a regional pronunciation of *kn* that struck his ear as similar to *tn*, or he may have heard conservative speakers use a sound-combination that gave him the same impression without being actually *tn*. It is questionable, however, whether his ear was any better than Ellwood's (see above). At all events, Festeau succeeded in bequeathing his unreliable analysis of *kn* as a sound similar to *tn* to a number of German, Italian, Dutch, and Swedish grammarians. It would, indeed, be a remarkable coincidence if Ludwig (1705) and König (1706) had also fallen in with speakers using dialectal *tn* and *dn*,⁴³ for I am convinced that educated Londoners had ceased to pronounce *k* and *g* in *kn* and *gn* at that time. (The uneducated had done so considerably earlier.) Moreover, a general development of *kn* > *tn* > *n*, provided it had taken place, which I seriously doubt, would certainly have advanced far beyond the *tn* stage at Festeau's time; what he heard was perhaps some kind of voiceless *n*, probably [ɲn] in that case.⁴⁴

³⁷ MLN 7.147 ff.

³⁸ Beiträge zur Geschichte der englischen Gutturallaute 7.

³⁹ Op.cit. §924.

⁴⁰ Spira, op.cit. §260.

⁴¹ EDGr. §§335, 345.

⁴² E. Ekwall, Historische neuenglische Laut- und Formenlehre §178.

⁴³ Lediard (1725), another German grammarian, repudiates the pronunciation *tn*, *dn* in these words: 'M. Ludwick sagt *k*, vor *n*, wird wie ein *t*, Arnold und andere aber wie ein *d*, ausgesprochen. Ein in der Englischen Aussprache Erfahrner wird aber gestehen müssen, dass nur eine pure, und zwar gelinde, aspiration, und keineswegs einen so hart und unangenehmen Klang, als *d*, oder *t*, vor *n*, geben musste, zu merken sey' (quoted from Ch. Müller, Die englische Lautentwicklung nach Lediard 99, footnote 2). The words *knack*, *knave*, *knife*, *knee*, *gnash*, *gnat*, *gnaw* he transcribes [hnäck, hnäve, hneif, hnie, hnäsch, hnät, hnäh]; see also Sweet, op.cit. §§924 f.

⁴⁴ Since more than one rule in Festeau betrays dialectal influence, it is not unlikely that he had learnt his English pronunciation from some Northerner, who believed that he was using *tn* for *kn*.

Let us assume for a moment, however, that the first stage in the reduction of *kn* was the assimilatory change of *k* to *t*. What happened to the following *n*? It is possible that the regressive assimilation was arrested for a while and that instead there was progressive assimilation, causing the *n* to become unvoiced. The next step would then be a gradual loosening of the nasal stop in [tɲ], that is, the disappearance of the [t]. Finally the comparatively few cases of initial [ɲ] were levelled under the more frequent cases of initial [n]. Yet the fully voiceless *n* is difficult to reconcile with the analyses of the early grammarians who heard a voiceless sound before the *n*, 'a pure gentle aspiration' (Lediard), which for want of sufficient phonetic insight they analyzed as *h*. If they did use [ɲ], we are forced to conclude that what they took to be [n] was merely the nasalized on-glide of the following vowel. The probability of such an analysis is not very great. On the other hand, if we assume a gradual loosening of the voiceless nasal stop of *t* in [tɲ] without any unvoicing of the [ɲ], we arrive at a sound-combination [ɲn], which finds excellent support in the statements of Brown, Watts, and others; to an untrained ear [ɲn] would certainly give the impression of *hn*. Finally this [ɲn] became [n] by regressive assimilation.

If we accept *tn* as the first step in the reduction of *kn*, we are still confronted with the problem of *knaw*, *kнат* for *gnaw*, *gnat*, and early spellings pointing to the same development, e.g. *knatte*, *knawyn* 4-6 NED.⁴⁵ We may, of course, assume with Sweet⁴⁶ that '*gn*- was levelled under the more frequent *kn*;' their common development to [ɲn] as outlined above would then satisfactorily account for Watts's *hn* for *gn* in *gnaw*, etc., and for Lediard's analysis of *g* in *gn* as 'an aspiration or *h*'. It is perhaps also possible that a similar levelling of both under *tn* occurred when *kn* had reached that stage and *gn* had become *dn*, or that at any rate the co-existence of *tn* and *dn* was responsible for the graphic vacillation between *gn* and *kn* mentioned above. Nevertheless, a general levelling of *kn* and *gn*, either directly or via the intermediate stage of *tn* and *dn*, would not account for the fact that some early grammarians (Coles, Strong, Osborn, Tuite) apparently recognize the complete loss of *g* prior to that of *k* in *kn*, which they, with the exception of Tuite, do not mention at all (through oversight?).⁴⁷ Bullokar (1580) had apparently heard both *gn* and *kn* in *gnaw*, which he spells *gnaweth*, *knaweth*.⁴⁸ On the other hand, Coote (1596) objected to *kn* for *gn* as a barbarous practice;⁴⁹ the implication is presumably that *kn* for *gn* was a relatively isolated phenomenon, limited to certain regional or class dialects. That *tn* < *kn* became *dn*⁵⁰ and was levelled with *dn* < *gn* is theoretically possible but entirely incompatible with the statements of the grammarians.

So far as I can see, the incontestable evidence of a dialectal or vulgar coalescence of *kn* and *gn* under the former does not warrant the inference that *gn* became *kn* over the whole speech area. True, Brown's, Watts's, and Lediard's

⁴⁵ Cf. *Studia Neophilologica* 7.134 footnote 1.

⁴⁶ *Op.cit.* §924.

⁴⁷ It is more common for *gn* to be forgotten owing to the few cases involved. However, final *gn* (in *foreign*, *reign*, etc.) is nearly always remembered.

⁴⁸ R. E. Zachrisson, *op.cit.* 173.

⁴⁹ *Anglia* 28.482.

⁵⁰ Viëtor, *op.cit.* §107 Anm. 6.

hn for *gn* and *kn* would at first blush seem to favor such an interpretation. Yet their *hn* may only be an inadequate symbol for two closely related sound-combinations, between which our grammarians could not differentiate. As I emphasized above, it is not essential for *k* and *g* to become *t* and *d* before finally disappearing in *kn* and *gn*. In my opinion the assimilatory influence exerted by *n* upon *k* and *g* need not consist in the shifting of the contact of *k* and *g* from the velum to the alveoli—that is, in the formation of *t* and *d* with nasal plosion, but it may equally well result in the nasalization of *k* and *g*, that is, in the production of [ɣ̃] and [ŋ]. By such a process of assimilation we obtain the nasal combinations [ɣ̃n] and [ŋn]. Identical nasal groups have been sporadically recorded by Gjerdman for initial *kn* and *gn* respectively in the modern city dialects of Södermanland, Sweden.⁵¹ In other Swedish dialects we may come across [ŋn] for initial *kn*, and even for initial *gn*, as well as [ɣ̃ɣ̃] for *kn*.⁵² Ellis tells us⁵³ that one of his helpers, Mr. Innes, always wrote [kɣ̃] for initial *kn* in the dialect of Cromar, Scotland. Even more significant is the occurrence of [ɣ̃ɣ̃] in the Shetland dialect (above); here the development seems to have been either [kn] > [kɣ̃] > [kɣ̃ɣ̃] > [ɣ̃ɣ̃], or [kn] > [kɣ̃n] > [ɣ̃ɣ̃], where [kɣ̃] represents [k] with voiceless nasal plosion.

By a further process of regressive assimilation [ɣ̃n] and [ŋn] were gradually reduced to *n*; as an intermediate stage between [ɣ̃n] and [n] we may suggest either [ɣ̃n] or [ŋn].

Phonetically the nasal combinations [ɣ̃n] and [ŋn] seem to be the most likely intermediate stage in the reduction of *kn* and *gn*, the more so since they are easily reconciled with the statements of the grammarians. To Daines (1640) [ɣ̃n] may certainly have given the impression of being pronounced 'a little in the nose or upper palat' and [ŋn] of 'inclining to the force of N';⁵⁴ [ɣ̃n] for *kn* may have impressed him in the same way, but definitely not [tn] or [dn]. And if the reduction had proceeded beyond the [dn] stage, there would only have remained [n], which could not, like [ŋn], be said to 'incline to the force of N'. Festeau (1672) presumably mistook the transition from [ɣ̃] or [ŋ] to [n] in [ɣ̃n] or [ŋn] for the nasal plosion of a weak *t*, unless his *tn* was merely an artificial or imaginary sound (like Ellwood's). Cooper (1685) analyzed [ɣ̃n] or [ŋn] as an *n* preceded by *h*, and so did Brown, Watts, and others. Miege's very weak *k* in *kn* was doubtless of the same nature, most likely also Maittaire's (1712) and Tuite's (1726). When Jones (1701) says that *kn* might 'be sounded *kn*', he probably, like Maittaire, referred to a conservative manner of pronouncing *kn* as [ɣ̃n] or [ŋn], as did Tiffin (1751) with his alternative pronunciation *hn*. The close similarity between [ɣ̃n] and [ŋn] must have caused hesitation as to their graphic representation. Certain dialects, no doubt, levelled the rare [ŋn] under the much more frequent [ɣ̃n], which to Coote, who probably used [ɣ̃n] for *kn* himself, would naturally mean a substitution of *kn* for *gn*; this he branded as vulgar. Brown and Watts, provided their *hn* for *gn* is not dialectal, were

⁵¹ O. Gjerdman, *Studier över de sörmländska stadsmålens kvalitativa ljudlära* 1.163.

⁵² A. Noreen, *Vårt språk* 1.430, 475.

⁵³ *Op.cit.* 767.

⁵⁴ R. Brotanek and M. Rössler, *Simon Daines' Orthoepia Anglicana* 42, 44.

unable to differentiate between [ʃn] and [ɲn], which both sounded like *hn* to them. What Lediard heard for *gn* was either [ʃn] or [ɲn]; in the latter case he made the same mistake as in his analysis of *wr*;⁵⁵ however, Lediard's description of *gn* and *kn* may only have been inspired by Watts's.

The series of changes that initial *kn* and *gn* underwent in English may therefore be graphically illustrated as follows:

$$(1) [kn] > [kʃn] > [ʃn] > \left\{ \begin{matrix} [ɲn] \\ [ɲn] \end{matrix} \right\} > [n],$$

$$[gn] > [gɲn] > [ɲn] > [n]; \text{ or}$$

$$(2) [kn] > [tn] > [tɲn] > [ɲn] > [n],$$

$$[gn] > [dn] > [n].$$

For reasons stated above I prefer the former alternative, believing that it represents the normal development. In certain speech-areas, however, the process of reduction may have followed the second alternative (perhaps in parts of Northern England). Whatever our preference, the essential point to bear in mind is that *n* in *kn* was never unvoiced itself but was, at one stage in the development, preceded by either [ʃ] or [ɲ], representing the almost totally assimilated *k* or *t*.

It is not possible to fix the exact date of the final stage, although phonetic spellings put the beginning of the changes back to the 15th century. Before 1700, *k* and *g* must have been silent in the current language, even though orthoepists and elocutionists may have endeavored to maintain an artificial distinction between initial *kn* and *gn* on one hand and simple *n* on the other. That the process of reduction was more rapid in certain areas and certain classes of society than in others is but natural and accounts for the seeming divergence in the evidence of the early orthoepists. From Shakespeare's puns we may safely infer that in the 16th century the colloquial language of the capital had the same sound for *kn* and *n*, although a more conservative type of speech continued to distinguish between them, perhaps as [ʃn] or [ɲn] and [n], until near the end of the 17th century. When some of the early grammarians report the loss of *g* in *gn* earlier than that of *k* in *kn*, we are justified in assuming that they mistook [ɲn] for simple [n] or that the final reduction of *gn* to *n* was, perhaps, one stage in advance of that of *kn* to *n*.

⁵⁵ Lediard maintains that in *wr* the *w* is 'little or scarcely heard, as in *wrack*, *wrench*, etc., in which I can only find a soft aspiration before *r*' (Sweet, op.cit. §919).

MORPHEME ALTERNANTS AND THE NOUN PHRASE IN HAUSA¹

CARLETON T. HODGE

FELLOW, INTENSIVE LANGUAGE PROGRAM

[The morphemes *na* and *ta*, best known in the so-called 'genitive' construction, have well-defined morpheme alternants in Hausa. Recognition of these simplifies the description of both morphologic and syntactic relations.]

One of the most frequent types of noun phrase in Hausa is exemplified by *dʔansàndaa* 'policeman'. This is analysable into *dʔaa* 'son', *sàndaa* 'club, stick', and the morpheme *n*, which may be conveniently translated 'of'—hence 'son of a club'. Other examples are *gidansarkʔàà* 'house of chain', i.e. 'prison'; *ʔàbincii* 'thing of eating', i.e. 'food'; *maagànsamro* 'medicine of mosquito', i.e. 'medicine AGAINST mosquitoes'; *ʔùbankààkaanaa* 'the father of my grandfather', i.e. 'my great-grandfather'. The construction covers a wide range of English meanings. Since our concern here is with morpheme alternants and not with lexicography, a list of these is out of place. However, it is easy to see how scholars were earlier led astray by considering the meaning rather than the form of such constructions. For example, in the phrase *kʔudànʂuunii* 'a blue fly', *kʔuddà* is 'fly', and the *ʂuunii* was naturally taken to be an adjective 'blue', connected with the noun by *n*. But in *farindooki* 'a white horse', the first element is the color-word *farii* 'white', and *dooki* means 'horse'; cf. *jaa* 'red' in *jandooki* 'a red horse'. When we compare a series such as *ʔidòndaama* 'right eye', *ʔidònhagu* 'left eye', *ʔidònkʔafà* 'eye of the foot', i.e. 'ankle', *ʔidònrùwa* 'eye of water', i.e. 'spring', we see that there is no difference in the use of 'right', 'left', 'foot', and 'water': all these words belong to the same syntactic group, so that *daama* really means 'the right-hand side' and *hagu* 'the left-hand side'. This is true of our other examples: 'blue fly' is really 'a fly of blueness'; 'white horse' is 'a white one of the genus horse'. Note the difference in the position of the word denoting the color.

There is no morphologic difference between the so-called adjective and the noun in Hausa; both have the same type of feminine and plural affixes. This was seen by Meinhof, who says, after a discussion of the feminine noun formations: 'Das Adjektivum bildet das Femininum meist auf *-a* (*-ña*) nach den obigen

¹ The following paper is based upon the speech of a single informant, John Frank (Abdu Hassan) of New York City, a native of Katsina province in Northern Nigeria. The material was collected in 1942-3 under the auspices of the Intensive Language Program of the American Council of Learned Societies. Although a few references to other studies are made here, dialect differences are negligible to the analysis and the term 'Hausa' is here to be understood as Mr. Frank's speech.

The transcription used here differs in several respects from that employed in Hausa Tone, JAOS 64.51, 52 (1944). Vowel length, except for *o* and *e*, is indicated by doubling the vowel. Tone contour juncture is only marked medially (by //), i.e. only in an utterance containing two contours. Word division is based on phonetics (vowel length). I wish to express my appreciation to Miss Helen E. Hause for assistance on vowel length and word division.

Regeln',² and after a discussion of noun plurals: 'Die Plurale der Adjektiva sind im Vorstehenden schon mit behandelt'.³ He does not conclude from this, however, that there is no separate class to be called adjectives. The purely nominal character of the 'adjective' has been slowly but never completely recognized. Migeod in his Hausa Grammar gets a glimmer of the truth; in his list of 'simple adjectives' he lists *baba* 'a big one', but says: "'baba" is in reality a noun meaning greatness'.⁴ Abraham, in his well-known Principles of Hausa, says: 'The number of adjectives is not very large and such as exist occupy an intermediate position between adjectives and nouns'⁵ and even 'Adjectives are commonly formed by placing one noun in the genitive before another noun:—RUWAN ZA.FI. hot water (lit. water of heat)'.⁶ If one's object is to state how English adjectives are expressed in Hausa, this is a perfectly valid statement. In his latest Hausa grammar (1941) Abraham says: 'True adjectives are few as most are really nouns'.^{6a} He then gives a list of 'true adjectives', including our word *farìi* 'a white one' and others whose form and use are as typically nominal. Among these is *s'ofò* 'an old one (m.)', for which we may give the example *s'ofombanzaanè* 'he's a foolish old man', literally 'an old one (m.) of foolishness is he'. (The change here of *n* 'of' to *m* is a regular phonologic substitution.) In no sense could *s'ofò* here be considered adjectival. The same objections may be raised to considering participles like *dàfaffe* 'cooked' as adjectives. They are used in our noun-plus-*n*-plus-noun construction in the same way as any other noun: *dàfaffennaama* 'cooked meat', literally 'a cooked portion of meat'. The descriptive analysis of Hausa includes no class, either morphologic or syntactic, which can be called 'adjectival'. This statement is incidental to our discussion of the morpheme *n* but must be clearly understood before a proper description of this form is possible.

We have, then, the construction noun plus *n* plus noun, abbreviated NnN. Our next step is to see what elements may occur in this construction in the same place as a noun. The first is the pronoun. We have, for example, *dookìnšì* 'his horse', literally 'horse of him', *gidanšì* 'his house', *d'ankà* 'your son', *d'antà* 'her son', *d'ammù* 'our son'. (The replacement of *n* by *m* is again phonologic.) We also have the pronoun *mii* 'what?' in *dòmimmù* 'why?', literally 'reason (*dòmi*) of what?' (the answer in the text being *dòmimmàce* 'on account of woman', showing a noun in exactly the same construction). Note that in all these cases the pronoun is the second N of our NnN construction.

We may also have a phrase as second N: *ʔàbindàkanàyii* // *kàbarši* 'quit doing what you're doing', literally 'the thing of that-which-you-are-doing, leave it'. Here we have the noun *ʔabi-* (morpheme alternant of *ʔabu* 'thing') plus *n* plus the phrase *dàkanàyii* 'that which you are doing'. Another example: *ʔàbindà* // *daama tàjimre* // *hagu bàtājimre ba* 'the thing the right hand gets used to, the

² Carl Meinhof, *Die Sprachen der Hamiten* 72 (Hamburg, 1912).

³ Ibid. 76.

⁴ F. W. H. Migeod, *A Grammar of the Hausa Language* 50 (London, 1914).

⁵ R. C. Abraham, *Principles of Hausa* 1.42 (Kaduna, 1934).

⁶ Ibid. 45.

^{6a} R. C. Abraham, *Modern Grammar of Spoken Hausa* (1941).

left won't get used to'. Our phrase here is *dādaama tājimre* 'that the right hand gets used to'. Both of these phrases are introduced by the morpheme *dā*. An example without it is: *komutuwaa // taasan ?allā // dōmin // ši // yaayitā* 'even death knows God, because He made her'. Here our phrase is *ši yaayitā* 'He made her'.

An indefinitely long series of nouns may be connected by *n*, as in *kāākankāā-kankā // kāākanninkāākanninkāākankā bāsūgani ?ābū wannān bā* 'the grandfather (*kāākaa*) of your grandfather, the grandfathers (*kāākannii*) of the grandfathers of your grandfather didn't see this thing'. Note that the pronoun *kā* 'you' is used like any other noun but occurs here only at the end of each (Nn)NnN phrase.

The only form of our morpheme that has appeared so far in the examples cited is *n* (with the sub-phonemic variant [ŋ] before *k* etc., and the phonologic variant *m* before *b* and *m*). The variant *na* occurs in *?ābū nādawā* or *?ābindawā* 'thing of the forest', i.e. 'beast' or 'forest spirit'. Here, *na* and *n* are apparently free variants. However, we find *na* elsewhere, as in *komii nāduuniyā // namaa-taanē* 'everything in (*nā*) the world pertains to (*na*) women'. Here we have not only a NnaN phrase but a phrase *na*-noun(-*ne*). Two *na*'s are to be distinguished here: *na* with high tone and *nā* with low tone. Another example of this simple *na*-noun construction is *bā nāfatahwā bā* 'it is not (a thing) of a ghost', i.e. 'it is not supernatural'. With this form of our morpheme we find an adverb possible in the second noun position: *naasani // ?allā nānañ* 'I know God is here (*nañ*)'.

Our formula has now been modified to Nn/naN; for the second N may be substituted a pronoun, a phrase, or an adverb. With this background we approach the following examples: *šināgaydā masū* 'he was (or is) telling them'; *šināzuwā* 'he's coming'; *mānenē // kāndasō?* 'what do you want?'. These are examples of the so-called 'present' or 'progressive' tense of the verb. As has long been known, this consists of pronoun forms with *nā* attached, followed by a verbal noun; but *nā* has not, to my knowledge, been recognized as the *nā* we have just discussed.⁷ This construction is simply NnaN with a pronoun as the first N: *ka* 'you (m.)' and *ši* 'he'. Moreover, though I have not found the following construction in my notes, Robinson states: '*na* is often used where we should have expected *suna*, e.g. *mutane na yin hak(k)a*, the men are doing so. *dawaki na gudu*, the horses are running away.' These are, in our analysis, NnaN constructions with a verbal noun as the second N. They are important in showing the identity of the 'progressive' tense and the NnaN forms. Furthermore, *šinā*, *sundā*, etc. need not be followed by a verbal noun. Any noun is eligible for the position, provided only the resultant phrase makes sense; for example, *sundāmāgandā* 'they're talking', where *māgandā* is not a verbal noun but simply means 'speaking, speech, language'; *šinād?ansāndā* 'he was a policeman'. As the last example shows, *šinā* may be the first Nna of a series such as NnaNnN.

We also find adverbs and phrases after pronoun plus *nā*: *šinā?inaa* 'where is

⁷ See D. Westermann, Some Notes on the Hausa People and their Language in G. P. Bargery, A Hausa-English Dictionary and English-Hausa Vocabulary xviii (London, 1934): 'The progressive has *na*, to be in a place, as its formative element'.

he?', literally, 'he of where?'; *šinànaṇ* 'he's here'; *sunà mašì waakʔàà* 'they sang a song about him', literally 'they of to him singing'; *nii* // *ʔinàdàkudʔii* 'I've got money', literally 'I of with money'.

We have now fairly well covered the types of syntactic environment in which our morpheme *n/na* occurs. A closely related element is the feminine counterpart of this morpheme. If the first noun in our phrase is feminine, the feminine morpheme for 'of' is used: *fuskàššì* 'his face (*fuskàà*)', *ʔùwakàà* 'your mother (*waa*)', *saabuwadduuniyàà* // *tanànaṇ* 'a new world is here' (*saabuwaa* 'a new one (f.)', *duuniyàà* 'world'). In these examples we have a different consonant each time: *š*, *k*, *d*. The feminine morpheme for 'of' in the construction noun-plus-'of'-plus-noun or pronoun is simply a consonant identical with the following consonant. (Plural nouns are always masculine. In the pronoun-na-noun construction the *nà* is invariable; *nà* follows both *ši* 'he' and *ta* 'she'.)

We have seen that *na* (with high tone) plus noun is possible. There is also a feminine counterpart. We have both *nagàri* 'a good man', literally '(one) of goodness' and *tagàri* 'a good woman'. We describe these facts by saying that *ta* is the high-tone alternant of our feminine morpheme before a noun (i.e. in *taN*).⁸ However, the word *nàgàrta* 'goodness', formed from the word *nagàri*, has *nà* with low tone. If we compare *muugu* 'an evil one' and *mùgùnta* 'evil', we see that the low tone of *nà* in *nàgàrta* is due to the pattern of a noun with *-ta* suffix. The tone of *na* is here determined by the tone pattern of the noun as a whole and is not independent of it, like the constant low tone of *nà*. *Na* with conditioned tone is an affix, and is followed by affix juncture,

We have further the forms *naakà* 'yours', where the thing possessed and the possessor are both masculine; *naakì* 'yours', where the thing possessed is masculine but the possessor (*ki*) feminine; but *taakà*, *taakì*, where the thing possessed is feminine. *Na-* and *ta-*, then, occur before nouns but *naa* and *taa* before pronouns. On the basis of pattern, and also that of vowel length, we may assume affix juncture after *naa-* and *taa-*. The forms for 'mine' are *nààwa* (masculine possessed) and *tààwa* (feminine possessed), replacing the morpheme sequences *na-nii* and *ta-nii* (note the affix juncture). The form *-wa* may be a variant of *nii* 'I' or another morpheme which replaces *nii* in this position (compare *waa* 'who?', *kowaa* 'everybody').

Here belong the otherwise anomalous forms for 'my': *ʔùbaanaa* 'my father', *ʔùwaataa* 'my mother', where the suffix accords with the gender of the thing possessed. These apparent suffixes *naa* 'my (m.)' and *taa* 'my (f.)' have already been recognized as the same morphemes as our masculine and feminine 'of' forms.⁹ Stated descriptively, the morpheme *na* has the alternant *naa* in the sequence noun-*na-nii*, the morpheme *nii* having the alternant zero. So also *taa* as alternant of *ta*. These alternants are not in affix juncture.

We now have the data necessary to state the alternants of our two morphemes, which we shall call *na* and *ta*. Using the symbol *C*¹ for a consonant identical

⁸ In some dialects, *t* also occurs instead of a consonant identical with the following consonant. See for example Meinhof 77.

⁹ See Westermann xviii, xix.

with the following consonant and a hyphen to indicate affix juncture, we have these forms and constructions.

- na*: noun *n* noun / pronoun / phrase
 pronoun / noun *nd* noun / adverb / phrase
 nd noun
 na- noun
 ndd- pronoun *nii*
 m. noun *naa* pronoun *nii*
 naa- pronoun other than *nii*
- ta*: noun C¹ noun / pronoun / (phrase)
 ta- noun
 tdd- pronoun *nii*
 f. noun *taa* pronoun *nii*
 taa- pronoun other than *nii*

These may be stated:

- na* is *ndd* in the sequence *na-* + pronoun *nii*
 naa in the sequences m. noun + *na* + *nii*, *na-* + pronoun other than *nii*
 na (accent variable) in the sequence *na-* + noun
 nd (accent invariable) in the sequences pronoun *na* + N, *na* + noun,
 and optionally in other NnaN constructions
 n in all other NnaN sequences
- ta* is *tdd* in the sequence *ta-* + pronoun *nii*
 taa in the sequences f. noun + *ta* + *nii*, *ta-* + pronoun other than *nii*
 ta in the sequence *ta-* + noun
 C¹ in NtaN sequences

As has been seen throughout this paper, pronouns function as nouns. With their alternants properly stated, each pronoun could be classed as a noun syntactically. We might further term our *na* a pronoun meaning 'it (m.) of' and *ta* 'it (f.) of' and resolve our NnaN and NtaN constructions into nothing but three nouns in apposition—a very common type of noun phrase in Hausa.

MISCELLANEA

AN EMENDATION IN HOMER¹

GEORGE MELVILLE BOLLING, OHIO STATE UNIVERSITY

In Φ 396 ff. Ares (according to Aristarchus and Ω) says to Athena:

ἦ οὐ μέμνη ὅτε Τυδείδην Διομήδε' ἀνῆκας
οὐτάμεναι, αὐτὴ δὲ πανόψιον ἔγχος ἐλοῦσα
ἰθὺς ἐμεῦ ὤσας, διὰ δὲ χροά καλὸν ἔδαψας;

'Do you not remember the time when you urged Diomedes to stab (me), and you yourself, seizing a spear that all could see, thrust straight at me, and tore my fair flesh?'

In the scholia we are told that the edition of Antimachus read ὑπονόσφιον, and P Gerhard of the 3rd century B.C. has πανόψιον with ὑπονόσφιον written above it. Leaf calls πανόψιον a strange word. It is found nowhere else, and Wecklein² gives a long list of emendations: πανίψιον (Bentley), πανόπλιον (Bothe), πελώριον (Herwerden), παναίολον (Christ), adding ἐπόψιον of his own.

Of the ancient variants, one makes Ares complain of the publicity of his defeat, the other makes him attempt to save face by picturing himself as the victim of a sneak attack. Such a divergence seems surprising. I would remove it by suggesting that πανόψιον 'all visible' is an awkward attempt to correct ἀνόψιον 'invisible', the appropriateness of which is not at once apparent.³ In their encounter (E 841-59) Athena was wearing a 'cap of darkness'; and so when she grasped Diomedes' spear, it too became invisible. It is of this unfair advantage that Ares complains.

There is no other occurrence of ἀνόψιον, but it is correctly formed according to a type of compound (with the negative prefix) that is frequent in Homer.⁴ On the development of compounds with παν- in the Homeric poems compare Hoenigswald, *LANG.* 16.183-8 (1940).

When it comes to a choice between the (practically) synonymous ἀνόψιον 'invisible' and ὑπονόσφιον 'surreptitious', I prefer the former as the more picturesque and as the more directly fitted to the context.

SYNTACTICAL JUNCTURE IN MODERN GREEK

HENRY AND RENÉE KAHANE, UNIVERSITY OF ILLINOIS

Close juncture between words is characteristic of Modern Greek. It is worth while to find out what form classes are regularly or almost regularly closely connected. Since in such an investigation one should not depend on mere

¹ This note is an outgrowth of work on an edition of the Iliad. In this connection I gratefully acknowledge a Minor Grant made by the American Council of Learned Societies for clerical and research assistance.

² Rh. Mus. 74.15 n. (1925).

³ Incidentally, πανόψιον would have a specious appearance of metrical superiority. It stops an (unobjectionable) hiatus.

⁴ Compare Risch, *Wortbildung d. hom. Sprache*, 192 (= *Untersuch. z. idg. Sprach- u. Kulturwissenschaft* 9; Berlin, 1937).

acoustic impressions if there is stronger evidence, one must turn to cases in which close juncture is provable. There are in Modern Greek two criteria to prove close juncture between words: sandhi and accent.

1. SANDHI. Greek words, before a pause, end in a vowel or in *s* or in *n*.

Concerning vowels. Two identical vowels are pronounced as one: 'and you' *k-ests*; 'the name' *t-ónoma*. (The hyphen is used throughout to indicate morphological division, i.e. to divide words. It has no phonetic significance.) When two different vowels come together, one may be suppressed, usually the weaker; *a* is the strongest vowel, followed by *o*, *u*, and *e*, with *i* weakest: 'the car' *t-aftokínito*; 'where is' *pú-ne*. There are three degrees of juncture in vowel combinations: (1) the vowels belong to two syllables ('where is' *pú-ine*); (2) both vowels form one syllable (*pú-ine*); (3) one vowel disappears (*pú-ne*). It is only the last of the three modes of pronunciation that we shall discuss here.

Concerning *s*. When two *s* sounds come into contact, only one *s* is pronounced: 'your father' *o-patéra-sas*; 'What's your name (How do they call you)?' *pó-saz-léne?* Before voiced consonants (with the exception of *z*) the sibilant is voiced: 'my son' *o-yóz-mu*; 'meat and potatoes' *kréaz-me-patátes*.

Concerning *n*. Before fricatives, there is no *n*: 'I don't want' *dhé-thélo*; 'the mother' (acc.) *ti-mitéra*. Before stops: *n* plus stop, voiced or unvoiced, produces the clusters *mb* with labials, *nd* with dentals, *ng* with gutturals: 'the father' (acc.) *tom-batéra*; 'the tavern' *tin-davérna*; 'I didn't understand' *dhén-gatálava*. If in such cases *p*, *t*, or *k* is followed by *s*, this *s* becomes voiced: 'like a lie' *sambzéma*; 'in your pocket' *s-tin-dzépi-sas*; 'I don't know' *dhén-gzéro*.

2. ACCENT. In Greek, the accent falls on one of the last three syllables of a word. Now, if we find 'our car' *t-aftokínitó-mas* beside 'car' *aftokínito*, or 'her name' *t-onomá-tis* beside 'name' *ónoma*, with shift of the main accent to the place of the secondary accent, we may conclude that the words *mas* and *tis* form a unit with the preceding words *aftokínito* and *ónoma*.

3. SANDHI PLUS ACCENT. Cases like 'I'd like' *thá-thela*; 'I have it' *tó-kho* show us the following. Of two closely joined words, if the first ends in an unstressed vowel and the second begins with a stressed vowel, the initial vowel of the second word disappears and the final vowel of the first word takes over its accent, provided that the final vowel of the first word is stronger than the initial vowel of the second.

There follows a list of the different form classes which are in close juncture with each other, as proved by sandhi or accent.

I. ENDOCENTRIC CONSTRUCTIONS

1. Noun phrases:

- (a) limiting adjective + noun
 - 'the door' (acc.) *tim-bórta*
 - 'a coffee' (acc.) *enan-gafé*
 - 'any barber' (acc.) *kanenan-guréa*
 - 'that man' (acc.) *aftón-don-gírio*
 - 'another woman's' *áliz-yinékas*
 - 'for a long time' *polín-geró*
 - 'which nation' *pyóz-laós*

- (b) descriptive adjective + noun
'better steaks' *kalítere-z-brizóles*
'the wide road' *o-platíz-dhrómos*
 - (c) article + noun + unstressed personal pronoun in the genitive
'our tailor' *o-ráftiz-mas*
'my room' *to-dhomatió-mu*
 - (d) noun + prepositional phrase
'meat and ("with") potatoes' *kréaz-me-patátes*
'factory worker' *ergháti-s-erghostásio*
 - (e) appositions
'Mr. Mylonas' *o-ktrioz-milonás*
'a kind of silk' *ena-idhoz-metáksi*
'with him as a pilot' *m-ektnon-dimonyéri*
2. Adjectival phrases:
- (a) adverb + adjective, adj. + adv.
'somewhat heavy' *kápoz-varís*
'still more beautiful' (neut. plur.) *omorfítter-akóma*
 - (b) adjective + pronoun
'I alone' *móno-z-mu*
 - (c) adjective + prepositional phrase
'crazy about you' *zurlóz-ya-séna*
3. Finite verb phrases:
- (a) particle of futurity (*tha*) or command (*as, na*) + verb
'it will be' *thá-ne*
'let him come in' *az-bí*
'you should come' *ná-rthete*
 - (b) verb + predicate complement
'Are you an American?' *ist-amerikanós?*
'it was a pity' *itan-gríma*
 - (c) negative + verb
'I don't sell' *dhém-buló*
'don't forget' *mín-gzekhnáte*
 - (d) verb + adverb, adverb + verb
'did they ever see' *ídhám-boté*
'here I am' *edhó-me*
 - (e) verb + prepositional phrase
'do you eat with Mary?' *tróz-me-ti-maría?*
4. Adverbial phrases (preposition + adverb):
'this way' *apo-dhó*
5. Coordinative constructions:
- 'but I' *ma-ghó*
 - 'and I' *k-eghó*
 - 'nor a worker' *mít-erghátis*

II. EXOCENTRIC CONSTRUCTIONS

1. Action-actor:

'I like the tavern' (the tavern pleases me) *m-arés-i-tavérna*
 'the birds sing' *lakín-da-pulyá*

2. action-goal:

'we'll take a taxi' *tha-párum-ena-taksi*
 'you are burning two' *kéz-dhío*

3. verb + pronoun, pronoun + verb:

'lift me' *sikosé-me*
 'give it to me' *dhoste-mú-to*
 'I have it' *tó-kho*
 'it pleases me' *m-arési*

4. prepositional phrases:

(a) preposition + noun phrase or noun substitute

'for an overcoat' *ya-na-panofori*
 'like my father' *san-dom-batéra-mu*
 'with us' *m-emás*

(b) compound preposition

'after' *íster-apo*
 'outside of' *apó-ks-apo*

(c) adverb + pronoun (replacing a prepositional phrase)

'in front of you' *embró-sas*
 'behind me' *pisothé-mu*

5. adverb + pronoun:

'you sometimes' *kapoté-su*

6. clause-subordination:

(a) conjunctions and particles in close juncture with the following phrase

'that I have' *ná-kho*
 'which is' *pu-ne*
 'that I speak' *poz-miló*

(b) conjunctions in close juncture with the preceding clause

'do you wish to' *théliz-na*
 'will you go to see' *páz-na-dhís*
 'do you think that' *léz-na*

7. phrase-subordination:

'like butter' *sa-vútiro*
 'as in America' *sa-s-tin-ameriki*

Close juncture between the words of a phrase is extremely common in Greek. With the exception of appositions, of prepositional phrases in endocentric constructions, and of subordinating conjunctions in contact with the preceding clause, all the combinations listed illustrate compulsory close juncture. If we have established, on the basis of objective criteria, that two form classes are regularly connected by close juncture, then the same form classes may well be connected by close juncture in those much more numerous cases in which such criteria are lacking.

SOME WELSH NOTES

ROBERT A. FOWKES, NEW YORK UNIVERSITY

Isalmaen 'Holland'

Pedersen (Vgl. Gramm. d. kelt. Sprachen 1.96) analyzes Welsh *Isalmaen* 'Holland' as *Isal-maen*, a compound, the second member of which he considers etymologically akin to Welsh *maen* 'stone' (cf. Cornish *men*, Breton *maen* 'stone'; OIr. *magen* 'place') : Skt. *mahī* 'earth'. He suggests that the transition from the meaning 'earth' to 'stone' must have occurred in a stony region. *Isal-maen* is evidently interpreted to mean 'lowland', which would be completely satisfactory as a name for Holland, although the expected form of the first component would be *isel-* or *issel-*.

It is, nevertheless, quite apparent that a faulty syllabic division has been made. The word is *Is-almaen*, i.e. *is* 'lower' (for attempted etymological explanation see Pedersen 1.50 and Morris Jones, Welsh Gramm. 248) plus *Almaen* 'Germany' (*Alemannia*)—cf. *Almaenaid* adj. 'German', *Almaenwr*, *Allman* m. 'German'—and the meaning is obviously 'Lower Germany'.

peuo 'to pant, puff, bellow'

Welsh *peuo* is the regular *p*-Celtic continuant of an IE **q^wēpo-* (IE *q^w* > Brythonic *p*; IE *-p-* vanishes). This base (cf. Walde-Pokorny 1.379) is further seen in Lith. *kvėpiù* 'breath', *kvėpėti* 'to be fragrant', *kūpuoti* ('Tiefstufe') 'to breathe deeply', Lett. *kvēpt* 'to steam, smoke', *kvēpes* pl. 'breath, smoke'. A closely related base is IE **q^wap-*, **q^wab-* (cf. Feist, Vgl. Wb. d. got. Spr.³ 7): Gk. *καπνός* 'smoke', Lat. *vapor* 'steam', Goth. *af-hapjan* 'choke, extinguish', *un-hvapnands* 'inextinguishable', OÍcel. *hvaþ* 'dropsical flesh', Russ. Czech *kop* 'smoke'.

mael 'gain, profit, advantage'

The Welsh words *mael-ion* 'gain, profit, advantage', *maeliant* 'gain, advantage', *maelio* 'to profit, gain, trade' have not been explained etymologically. It is possible, however, to show that they are related to a group of Celtic words whose etymology has already been established: OBret. *mael* 'prince', OBrit. *Maglocunus* pr. n. (Welsh *Maelgwn*), Gaul. *Magalosos*, Ir. *mál* 'noble, prince'. These are acknowledged to be cognate with Gk. *μέγας*-, Goth. *mikils* 'great, large', cf. Pedersen 1.103; Feist³ 358–9. It is no great semantic difficulty to proceed from the meaning 'large, great' to 'augment, gain'. That *mael* is the exact phonetic correspondence of Celt. **magalo-*, Brythonic **maglo-* is proved by the example cited above: Welsh *Maelgwn* < *Maglocunus*. The word *mael* 'gain, profit' is therefore identical, phonetically and etymologically, with the first component of *Maelgwn*, a fact which seems not to have been hitherto recognized.

dyfnu 'suck'

This word is from the IE base **dhē-* 'suck' (with its variant forms **dhēi-*, **dhē-*, **dhə(i)-*). The Celtic equivalent of an IE **dhēm-eno-* would be **dīm-eno-*, yielding OW **dīm-nu*, NW *dyfnu*. The closest cognates, phonetically, are Lat. *fēmina* ('the one giving suck') and Gk. *θημένη*. Cf. further Lat. *fēlo*, *fēlare* 'to

suckle' (< IE *dhē-l-), Umbrian *feliuf*, *filiu* 'lactantes', Lat. *filius* < *fēlios, Gk. *θηλή* 'mother's breast', *θηλυσ* adj. 'giving suck, feminine', *θηλαμών* 'wet nurse', Lith. *dėlė* 'leech, bloodsucker', Skt. *dhārú-h* 'sucking'. Related Celtic forms are OIr. *dtnu* 'lamb', *dúth* 'sūxit', *dinim* 'I suck', Breton *denaff* 'suck'.

gwlithen 'stye, whitlow'

Phonetically, a base **ulikt-* < **ueleg-t-* would yield Welsh *gwlieth-*. From such a base are derived OHG *welc* 'soft, damp', *welc(h)en* 'fade, decay, rot', Dutch *welken* 'fade, wilt', early NE *welk* 'wither, fade, shrivel'; cf. also OCS *vlaga* 'moisture', *vlügükü* 'damp', Lith. *vilgyti* 'dampen', Lett. *wēlgans*, *wālgans* 'moist, damp'. Other related Welsh words are *gwlieth* 'dew', *gwliethlaw* 'drizzle', *gwlydd* 'mild, tender, soft'. English *will* may be ultimately connected with these words.

It is necessary either to assume a basic meaning 'wet, soft, decayed' or to posit a single original meaning 'wet', with independent extension in Celtic and Germanic, arriving at the second sense of 'rot, decay'.

GOTHIC *gabaurjōþus*

F. MEZGER, BRYN MAWR COLLEGE

In a number of IE languages, verbal *ti-* and *tu-*stems are distributed in such a way that, quite frequently, a *ti-*stem appears in composition and a *tu-*stem as a simplex.¹ Thus Goth. *kustus* : *gakusts*, *wahstus* : *uswahts*, Av. *ǰyātu-* 'life' : *ǰyāti-* in composition (*a-*, *darəgō-*, *duž-*, *hu-*, *fra-*). In many cases, a simplex ending in *ti* can be shown to have arisen out of a compound verbal abstract noun ending in *ti*.² The *ti-*stems are derived from the root, whereas the *tu-*stems may be formed on the root as well as on a stem.

In Gothic three examples of non-compositional *tu-*stems are derived from verbs of the second weak class: *gaunōþus* 'mourning, lamentation' : *gaunōn*; *wratōdus* 'journey' : *wratōn*; and *auhǰōdus* 'tumult, noise' : *auhǰōn*. There is a fourth *tu-*formation *gabaurjōþus* 'pleasure, ἡδονή', which is also assumed to be derived from a verb.³ Another *tu-*formation, *manniskōdus* 'humanity', is clearly derived from an adjective.

Feist⁴ expressly states that *gabaurjōþus* is formed from the verb **gabaurjōn*, and then brings together *gabaurjaba* 'gern', *gabaurjōþum* (DP1.), **gabaurjōn* with the Germanic stem *burja-* 'in ae. *byre*, *gebyre* m. günstige Gelegenheit und in denom. Verben: aisl. *byrja* sich ziemen'.⁴ It is not difficult to find good reasons

¹ Bahder, Verbalabstr. 77 A.; Wilmanns, Dt. Gr. 2.330; W. Schulze, KZ 42.325 (1909); J. Wackernagel, SBPrAkad. 1918.380 ff.; Meillet, BSL 25.123 ff. (1924).

² Meillet 126 ff. The verbal *ti-*abstracts referred to appear as second elements of compounds. They are to be distinguished from verbal *ti-*formations used as first elements of compounds formed from stems as well as roots. See Specht, KZ 59.71 ff., and Wackernagel Ai. Gr. 2.1.320 f.

³ Kluge, Nominale Stammbildungslehre³ §134: 'also neben schwv.; so vielleicht auch got. *gabaurjōþus* "Lust"'. Wackernagel 380: '*gabaurjōþu-* "Lust" bildet die einzige Ausnahme [von der Regel, "dass im Simplex -*tu-*, im Kompositum -*ti-* erscheint"] und da handelt es sich um das gangbarste Präverbium'.

⁴ S. Feist, Vgl. Wb. d. got. Spr.³ 175.

against such a correlation. The meaning of an assumed **gabaurjōn* 'sich freuen' differs from the meaning of the denominative Gmc. verbs OIcel. *byrja* etc. recorded by Feist as 'sich ziemen; geschehen, passen; Sorge tragen; statthaben; geschehen, gebühren'.

In place of the former explanation, a different solution is suggested which connects *gabaurjōpus* 'ἡδονή' with the adverb *gabaurjaba* 'ἡδέως, ἡδιστα'. Such a solution accords with the rule that a verbal *tu*-stem does not appear in composition; it is satisfactory from the point of view of meaning; and it obviates the need for positing a hypothetical **gabaurjōn* as a reason for the existence of *gabaurjōpus*.

Gabaurjōpus is apparently an occasional formation. The pattern seems to be *auhjōdus* 'noise', rather than the *tu*-formation *lustus*,⁵ although *lustus* and *gabaurjōpus* were closely related in meaning. This can be inferred from the fact that *gabaurjaba* appears as a marginal gloss to *us lustum* (Phil. 14). As to the possibility of a close connection between *auhjōdus* 'noise' and *gabaurjōpus* 'ἡδονή', we may compare the usage of OE *dréam* 'mirth, rejoicing, singing' (esp. 'the loud mirth in the hall': *he dréam gehýrde hlúdne in healle*, B 88; 'the great merriment of drinkers': *drincendra dréam se micla*, Wid. 79; see also B 497).

⁵ For the possibility of the existence of an adverb **gabaurjō*, cf. *andaugjō*, *þiubjō*, *gahāhjō*, *arwjō*, *alakjō*, *allandjō*, (*ufjō*?).

PORTUGUESE *iguaria*

LEO SPITZER, JOHNS HOPKINS UNIVERSITY

In spite of the formidable array of parallels, phonetic as well as morphological, displayed by Dr. Malkiel, LANG. 20.108, in order to justify his suggestion that Port. *iguaria* 'tasty dish, dainty food', attested since the 14th century, is a continuation of the hapax *iecuaria* 'giblets of poultry' (found in a Late Latin gloss of the 7th century, and explained by Heräus either as a derivative from *iecur* 'liver' or as an alteration of *gigerium*, *zizerium*), I am tempted to look for a simpler etymology, and one which does not involve a problematic Latin etymon, the preservation in Portuguese of the word-family of *iecur* which is attested nowhere else in Romania, a rare type of dissimilation, and a change of suffix in the 4th-6th century (*-ária* > *-aria*). It seems to me that it is always preferable for the Romance etymologist to turn first to Romance and to exploit the possibilities there offered—especially when he is faced with a word attested as relatively late as the 14th century. It should also be remembered that the semantic shift entailed by Malkiel's explanation, from the specific ('one particular tasty dish') to the general ('tasty dish') is infrequent in general; the reverse is rather to be expected (cf. Germ. *Delikatessen*; Fr. *bonbon*; *daimtiers* < *dignitas* etc.).¹

I would propose a derivative from the existing OPort. (Galic., OSP.) *iguar* 'to make equal' (< Lat. *aequāre*, cf. Rev. Lus. 13.331; REW 239), coined with

¹ In the case of any specific delicate food, the very distinctive quality that might seem to qualify it as a standard of excellence belongs so inherently to its individual, unique nature that any generalization of meaning is excluded ('terrapin' will always remain 'terrapin').

the aid of the existing Port. suffix *-arta* in its deverbal function. The FEW gives Gallo-Romance derivatives of *aequāre* such as *egance* 'portions égales' (cf. Ducange *aequantiare* 'partager également'). Why should Portuguese not have had the same extension of meaning? *Iguaria* would then have meant originally '(distribution of equal) portions'.² In the oldest attestation recorded in the careful research of Malkiel (*Fabulário Português*, 14th cent.), we find the phrase *muytas delicadas higuarias*, which is translated by Malkiel as 'many choice morsels'; here, the concept 'choice' is expressed by the adjective *delicadas*, and [h]iguarias means simply 'morsels' (< 'portions'). From 'morsel', the transition to 'choice morsel, tidbit' is easy.

² The original meaning of **aequ-arta* could also be 'compensation' (OProv. *egansa* 'compensation'; cf. OSp. *parias* 'tribute', OPort. [h]igualdaçom, Germ. [eine Schuld] begleichen: as is well known, the feudal overlord of the Middle Ages compensated his subjects for their services with food, clothing etc. (cf. OFr. *livraison*, *livree*). And the *iguaria* of the Azores 'object put up for sale at Whitsuntide' (O. de Pratt quotes a passage in which 'arrematação das offerendas' is mentioned) points to 'offering' (< 'compensation', cf. Lat. *hostia*, explained by Ernout-Meillet from this very meaning), i.e. to a more general meaning range of the word.

REVIEWS

THE LOOM OF LANGUAGE. By FREDERICK BODMER, ed. by LANCELOT HOGBEN. Pp. 692. New York: W. W. Norton, 1944.

The Loom of Language is the third in a series of books which have as their principal purpose the interpretation of science to the layman. Mathematics for the Million was the first of these; in it Lancelot Hogben attempted to describe the practical origins of mathematics as well as to present in non-technical language the essentials of mathematical procedures. Science for the Citizen, also by Hogben, had the same objective in regard to the natural sciences.

It should be noted that these books, as well as the work under review, are neither simple popularizations nor mere 'self-help' manuals. They seek rather to steer a middle course. Mathematics, the sciences, and linguistics are to be presented as accurately as possible but in a language wholly free from merely academic technicalities, and from the point of view of the practical, everyday citizen rather than the cloistered scholar. In The Loom of Language, Hogben states this general purpose as follows: 'First and foremost *The Loom of Language* is a book which adults can use as a basis for sustained study, and a book from which teachers alert to new techniques of instruction to meet the needs of the ordinary citizen can get helpful suggestions with a direct bearing on their daily task. Its design is based on the conviction that in the past the orientation of studies in many of our schools and universities has not provided a sufficient equipment for the constructive tasks of the society in which we live, that radical changes in the scope and methods of education are a necessary condition of continued social progress, that such educational reforms will not come about unless there is a vigorous popular demand for them' (ix). And later: 'Because this book is a successor to *Mathematics for the Million* and *Science for the Citizen*, its motif is social and its bias is practical' (x).

The author of The Loom of Language, Frederick Bodmer, is described by his editor as a former colleague at the University of Cape Town. There he served as a Lecturer in German. Other than this he is not identified, either in terms of his scholarly publications or with regard to his present position. Reference materials available to the present reviewer fail to provide additional data.

Hogben had a great deal more to do with the actual writing of the book than is usual for an editor. He and Bodmer discussed and reviewed every chapter in detail before it was put in final form, and Hogben even admits to having condensed and rewritten some of the chapters. Nevertheless, as he himself maintains, the 'erudition' displayed in the work is wholly that of the author. Hogben functioned solely as an interested layman whose principal task was to test the communicability of the author's expositions.

Primarily, The Loom of Language is designed to contribute to a major social problem: the persistence of linguistic diversity in a world more or less uniform in other aspects of civilization. 'In the pursuit of their tool-bearing activities, men and women have learned to co-operate on a planetary scale; but such co-operation is perpetually thwarted by local limitations of their speech habits.

What is characteristic of the intellectual achievements of mankind . . . is a common possession of all nations which encourage scientific research, but nations have no common idiom through which workers by brain or hand can communicate results of research or collaborate in applying them to human welfare. Modern technology is a supernational culture which ministers to the common needs of human beings, while language limps behind the human endeavor to satisfy needs which all human beings share' (3).

One way of removing linguistic impediments to easier worldwide communication is 'to canalize the interest of intelligent men and women into the constructive task of devising or of adopting an *auxiliary* medium to *supplement* existing national languages . . .' (3). In order properly to achieve this task it is necessary to know something of how 'natural' languages have developed, so that we may 'recognize defects which we ought not to perpetuate, and merits which we should incorporate, in a language of world citizenship' (27).

Much of the book is devoted to this end. The whole of Part One (called The Natural History of Language and containing a chapter each on the story of the alphabet, accidence, syntax, and the classification of languages) is liberally interspersed with the recognition of such defects and merits. Part Three is given over wholly to The World Language Problem. The first chapter of this part (Chapter X. The Diseases of Language) analyzes from Bodmer's point of view the defects and merits of Indo-Iranian, Balto-Slavic, Celtic, Semitic, Chinese, and, very briefly, Pidgin English. Chapter XI (Pioneers of Language Planning) contains a history of international languages as well as brief analyses of the advantages and disadvantages of those so far produced. And in the final chapter of this section (Language Planning for a New Order) arguments are advanced in favor of language planning, and specifications for an international auxiliary presented. An acceptable international language, devised in the light of Bodmer's analyses, should be:

(1) Isolating. 'With the possible exception of a plural terminal, it would have no flexional modifications of word form . . . its rules of grammar would be rules of word order. These would be as uniform and as few as possible. In short, the grammar of the language could be set forth fully with examples in half a dozen pages of print' (516).

(2) 'essentially a language with Latin-Greek word materials, so chosen that the beginner could associate items of the basic word list with syllables of internationally current words' (516-7).

(3) Economical of words. 'That is to say, the entire list of words [not counting various specialized vocabularies] . . . might not be more than one thousand' (517).

(4) Spelled regularly with a spelling 'based on the characters of the Latin alphabet' (517).

(5) 'easily equipped [because of its word economy] with the type of simplified *alphabetic* shorthand embodied in R. Dutton's ingenious system of *Speedwords*' (517).

Despite this great emphasis on language planning, The Loom of Language is not 'first and foremost a plea for language planning' (4). Indeed, language

planning alone will not solve the problem of worldwide communication, for the author clearly recognizes the fact that an international language, however chosen, will in no sense replace existing national idioms. Further, as his prescription clearly indicates, an international auxiliary can only function as a minimal means of communication between peoples of differing national tongues. For a true understanding of world problems it is equally necessary that a means be found whereby ordinary citizens can gain, as quickly and as easily as possible, a working knowledge of at least the principal world languages. This objective, the author insists, is wholly possible, once we succeed in finding a proper method of teaching languages.

Present methods of language teaching in American and British schools are, in the author's belief, wholly inefficient. For one thing, students rarely know why they are studying a language, and teachers are equally vague as to the objectives of their teaching. But: 'This is not the whole story. To sins of omission we have to add all the positive obstacles which early formal education places in the way of those who have no strong personal inclination for linguistic studies. The greatest impediment, common to most branches of school and university education, is the dead hand of Plato. We have not yet got away from education designed for the sons of gentlemen. Educational Platonism sacrifices realizable proficiency by encouraging the pursuit of unattainable perfection' (5).

For these reasons, then, *The Loom of Language* is designed not only to explore languages toward the end of devising an efficient international auxiliary, but also to examine world idioms with a view to how they may best be taught. The knowledge about modern languages that we may gain from comparing them one with another and surveying the history of their development will 'help us to get clearer about the best way to begin learning any particular [language] We shall . . . be in a better position to judge whether it is best to concentrate on speaking, writing, or reading in the early stages, and to decide what course to pursue in writing or speaking in order to fix the minimum vocabulary and grammatical rules we have to use' (27).

Bodmer insists that a careful distinction be made between learning to read, write, speak, and understand a foreign tongue. Each of these ends requires a different technique. With developing the ability to speak or understand, however, he is little concerned. Once the student can read and write, his speaking and understanding will come easily enough when, but only when, he is exposed to native speakers. Bodmer's main concern is with reading and writing or, more fairly perhaps, with the problem of gaining the minimum necessary command over the dictionary and grammar of the language being learned. Thus he spends much time, particularly in Parts One and Two (*Our Hybrid Heritage: How to Learn the Basic Word List, Our Teutonic Relatives, The Latin Legacy, Modern Descendants of Latin*), in delineating what he considers to be the necessary and functional aspects of grammar for those interested in learning languages. Briefly, these include a knowledge of many 'derivative words not commonly listed in dictionaries' (122); i.e. pronouns in all their variations, plural forms of nouns, auxiliary verbs, tense forms of verbs 'necessary in ordinary speech or correspondence' (117), and other inflected forms 'which still affect the meaning of a

statement' (114). 'When we can recognize [these] . . . and can use those which are essential, without offense to a native, we still need to know in what circumstances a word in one language is *equivalent* to a word in another, how the meaning of a sequence of words is affected by the way in which we *arrange* them, and what derivatives to use in a particular context' (122-3).

The building of a vocabulary is important as well. Here Bodmer insists that this tedious task is much lightened if two or even more related languages are taken together. He holds that language teachers should exploit the similarities between related languages and teach their students at least the more regular of the phonetic correspondences which link one cognate language with another. Thus: 'This conclusion [i.e. that languages are related] is of great practical value to anyone who is learning a language. Sound transformations between related languages such as English and German, or French and Spanish, are not mere historical curios, like the sound changes in the earlier history of the Indo-European group. How to recognize them should take its place in the technique of learning a foreign language, because knowledge of them is an aid to memory, and often helps us to spot the familiar equivalent of an unfamiliar word. Use of such rules . . . should be part of the laboratory training of the home student who is learning a new language. The reader who takes advantage of the exhibits in the language museum of Part IV can exchange the monotony of learning lists of unrelated items for the fun of recognizing when the rules apply, of noticing exceptions, and of discovering why they are exceptions' (179). The numerous pitfalls inherent in such methods are not mentioned, however. To this reviewer at least, the many qualifications of detail attendant upon even the most regular of phonetic correspondences, the inconsistencies arising as a result of analogic change and borrowing, and the many cases in which meanings change without a corresponding change in phonetic form and vice versa would make this type of training confusing rather than helpful to the beginning student.

The 'exhibits in the language museum' to which the author refers are lists of basic words in several Germanic and Romance languages. Words equivalent (but not necessarily cognate) in English, Swedish, Danish, Dutch, and German are given in parallel columns in one section, while in another we find English, French, Spanish, Portuguese, and Italian words similarly grouped. Since the author gives no indication of how the foreign words are to be pronounced, and since cognates are not distinguished from borrowings or simple translation forms, it is difficult to understand just what the beginning student is supposed to do with the 'exhibit'. A third list provides the 'Greek roots in common use for technical words of international currency,' which is presumably for use as a reservoir of vocabulary for Bodmer's international auxiliary.

From this brief survey of Bodmer's purposes in writing *The Loom of Language*, it is evident that he is not primarily concerned with the science of language per se but rather with the practical applications of such a science to the problem of international communication. He seeks to understand the reasons for continued linguistic diversity in a world which in other aspects of culture is becoming more and more unified. Basically, Bodmer holds that this situation has come about largely because languages have developed in a planless and disorderly fashion.

The history of languages 'is not a record of deliberate and intelligent prevision. It is partly a story of confusion resulting from a continuous record of slovenliness and of obstinate complacency toward the mistakes of our grandparents. It is also a story of ancestor worship, and of makeshifts to conserve the ineptitudes of a supposedly heroic past' (3-4).

Once we have recognized this cardinal point, Bodmer avers, we can then proceed intelligently to the task of learning languages and planning an international auxiliary. It is clear, then, that Bodmer is not writing as a linguist but primarily in a spirit of social reform. Since, in his opinion, languages have become littered, as it were, with the odds and ends of thousands of years of aimless development and careless use, the forward-looking linguist and language teacher should not carefully preserve these illogicalities and redundancies of language, but should abolish them. Linguists and language teachers have in the past failed to do this; they have instead functioned as ancestor worshippers guilty of 'makeshifts to conserve the ineptitudes of a supposedly heroic past'. As a result, languages are unnecessarily difficult to learn. Bodmer continually reiterates his charge that language teaching has purposely been made difficult by 'perfectionist pedantry' and so linguistic facility has become 'the cultural trademark of a leisure class' (6). This, to Bodmer, is inconsistent with, if not actually a danger to the establishment of a democratic world order. It is the purpose of his book to remove this inconsistency.

There can be little doubt of the reality of the central problem raised by Bodmer. The increasingly evident trend in the modern world toward greater economic and political interdependence cannot be denied. It is also true that linguistic diversity, or better, the lack of an international means of communication, together with the essential failure on the part of educators to teach languages effectively, constitutes an important barrier (though certainly not the only or even the most important barrier) to international goodwill and understanding. It is equally clear that solutions to this problem must come in part from a thoroughly scientific analysis of linguistic structures; must come, in short, from a well developed body of data on the science of language. In this connection the fact may well be marked that notable contributions to the methodology of teaching languages have already been made by scientific linguists in the Army Specialized Training Program (see Mary Haas, *The Linguist as a Teacher of Languages*, *LANG.* 19.203-8).

Unfortunately, however, Bodmer is not a linguist in the sense in which we are using the term. He does know something of the comparative method; he very evidently has a wide though uneven knowledge of certain Indo-European language groups; and he has made a systematic and detailed study of both the history of international auxiliaries and the numerous problems to be faced in the setting up of an international language. But very serious doubts may be cast upon the author's ability to treat the purely linguistic problems incident to his main end. It is clear, for example, that Bodmer has no conception of such basic and elementary distinctions as those differentiating letters and speech sounds, speech sounds and phonemes, syllables and morphemes, and words and morphemes. Hence we find such absurdities as the following: 'Thus we can dis-

tinguish between words of three kinds. Some are the smallest elements of speech of which ordinary people can recognize the meaning. Some, separated by careful study, are products of grammatical comparison of situations in which they recur. People of a preliterate community would not recognize them as separate elements of speech. We recognize others as separate, merely because of the usual conventions of writing. The missionary or trader who first commits the speech of a nonliterate people to script has to use his own judgment about what are separate words, and his judgment is necessarily influenced by his own language' (37). 'When highbrows want a word for all pronounceable constituents of a printed page, each with a distinct meaning or usage of its own, they may speak of them as *vocables*. Vocables include words listed in dictionaries, and derivatives which are not' (37). 'It is an accident that the syllables *man* and *age* in the word *manage* have a meaning when they stand by themselves' (38). '... syllables which have a meaning relevant to the meaning of the whole word are called *roots*, though root words are not necessarily *single* syllables' (38). 'The ultimate bricks of a vocable are represented by the *vowel* symbols (in English script *a, e, i, o, u*) and the *consonants* which correspond to the remaining letters of our Roman alphabet' (40). 'When fusion of the final *-s* of the plural, and *-ed* of the past with the preceding consonant of the noun or verb stem took place, necessary changes occurred. We pronounce *cats* as *kats* and *cads* as *kadz*. We pronounce *sobbed* as *sodd*, and *helped* as *helpt*. Thus the grammatical rules of English would be a little more complicated, if we spelt all words as we pronounce them. We should have a large new class of plurals in *-z*, and many more past forms of the verb ending, like *slept*, in *-t*' (67).

Our misgivings as to Bodmer's technical competence in linguistics are confirmed by similar curiosa occurring throughout the book. Let us examine, for further examples, his chapter on *accidence* (subtitled *The Table Manners of Language!*), which is an attempt to study the development of flexions in the Indo-European languages as well as the circumstances which have led to their decay. Such a study, the author maintains, will help 'to learn languages in which the flexional system of the old Indo-European languages has decayed far less than in English' and 'also helps us to see characteristics to incorporate in a world medium which is easy to learn without being liable to misunderstanding' (82-3).

Words grow, we are told, (1) by combining with other words to form compounds, (2) by fusing with other words constantly occurring in the same context through 'slipshod pronunciation' (this process is called 'agglutination!'), and (3) by taking over affixes borrowed from other languages. Once words have fused in the sense defined in (2) above, analogical extension enlarges the classes of derived words so formed. Dictionaries list some derived forms but others are found only in grammars. 'The real reason' for this distinction between one kind of derived form and another 'is this: vocables are put in grammar books instead of in dictionaries because they correspond to the class of derivatives most common in Latin or Greek.' And then: 'Grammarians call such derivatives, or their affixes, *flexions*. . . . Whether derivatives formed by adding affixes are called flexions depends largely upon whether they correspond to

derivatives formed from a root with the same meaning in Latin or Greek' (81-2). Comment would appear to be superfluous.

All flexions originated, it seems, in independent words which, through 'slipshod pronunciation', became attached to verbs, nouns, or other words, and finally, through loss of significance and phonetic decay, became 'unnecessary linguistic luggage'. As an example of Bodmer's method we may quote the following two paragraphs purporting to describe the origin of personal flexions in the Indo-European languages (85-7):

One thing the table exhibits is this. It was not customary to use the personal pronoun equivalent to *I, he, we*, etc., in the older languages of the Indo-European family. The ending attaching to the verb really had a use. *It had to do the job now done by putting the pronoun in front of it.* So the ending in modern descendants of such languages is merely the relic of what once did the job of the pronoun. This leads us to ask how the ending came to do so. A clue to a satisfactory answer is also in the table, which exposes a striking family resemblance among the endings of the older verbs of the Indo-European family. Of the five older representatives, four have the suffix *MI* for the form of the verb which corresponds to the first person singular. This at once reminds you of the English pronoun *me*, which replaces the first person *I* when it comes after the verb in a plain statement. Our table (p. 87) of corresponding pronouns of several languages placed in the Indo-European group, encourages us to believe that the correspondence between the English pronoun *ME* and the ending *MI* is not a mere accident.

The meaning of this coincidence would be more difficult to understand if it were not due to a process which we can see at work in Anglo-American at the present day. When we speak quickly, we do not say *I am, you are, he is*. We say *I'm, you're, he's* The fact that the agglutinating, or gluing on of the pronoun, takes place in this order need not bother us, because the habit of invariably putting the pronoun before the verb is a new one. In Bible English we commonly meet with constructions such as *thus spake he*. Even in modern speech we say *sez you*. In certain circumstances this inversion generally occurs in other Teutonic languages as in Bible English. It was once a traffic rule of the Aryan family; and it is still customary in one group of Aryan languages. This group, called the Celtic family, furnishes suggestive evidence for the belief that the personal flexions which do the work of the absent pronoun in Latin or Greek were originally separate pronouns placed after the verb.

Flexions of person, tense, number, comparison and adverb derivation, gender, case, mood, and voice are likewise treated. Personal and tense flexions are disposed of as follows: 'Clearly there is no tragedy in the removal of an overgrowth of mispronunciation that led to flexion of person. Similar remarks apply with equal force to the loss of tense flexion' (95). Number flexion, however, is a different matter: 'The number flexion *-s* of *houses* is not useless, as is the personal *-s* of *bakes*, nor pretentious like the luxuriant Latin tense distinctions. . . . Number flexion does not give rise to great difficulties for anyone who does not already know how to write English. Nearly all English nouns form their plural by adding *-s* or replacing *y* and *o* by *-ies* and *-oes*. As in other Germanic languages, there is a class with the plural flexion in *-en* (e.g. *oxen*), and a class with plurals formed by internal vowel change (*louse, mouse, goose, man*). The grand total of these exceptions is less than a dozen. They do not tax the memory. So we should not gain much by getting rid of number flexion' (98).

Comparison, too, is a 'very regular and useful, though by no means indispensable' flexion (99), but adverb derivation 'is at best a convention of context,

and the complete decay of the adverbial derivative would be a change for the better' (100). The chapter is concluded with the following general verdict and a bit of advice: 'Though we cannot use a dictionary with profit unless we know something about accidence, we can lighten the tedium of getting a reading knowledge of a language, or of writing it intelligibly, if we concentrate first on learning: (a) flexional derivatives least easy to recognize, when we look up the standard form in a dictionary; (b) flexional derivatives which still affect the meaning of a statement' (115).

One of the underlying misconceptions prevalent in the foregoing excerpts and running consistently throughout the book is Bodmer's curiously anthropomorphic view of language. Language, from his descriptions, is not an unconsciously developed set of habitual behavior patterns but a more or less carelessly made and slovenly construction of its grammarians and speakers. Its formal structure is in part 'unnecessary luggage' or an 'overgrowth of mispronunciation' preserved by the 'ancestor worship' of grammarians and by the 'obstinate complacency' of its speakers toward the 'mistakes' of their grandparents. One may just as well say that an earthquake or a violent storm is an error of a usually benign 'Mother Nature,' or that the peculiarities of dress and custom prevailing in a society are due to the vagaries of a 'group mind'.

Another basic error is found in Bodmer's characterization of certain categories of language as 'useless', 'pretentious', or non-functional. Such categories, he maintains, are carry-overs from a period in which they were functional; they represent a lag in linguistic development similar to the 'cultural lag' of certain social scientists. But there is no real evidence, either in culture or in language, that traits persist without function. And to regard all flexions which no longer exist in English as functionless survivals adds the sin of ethnocentrism to that of linguistic naïveté.

Despite, therefore, the significance of the problems posed by Bodmer and the numerous items of interest and value that may, albeit laboriously, be exhumed from his book, it must be confessed that *The Loom of Language* contributes more to confusion than to clarity. This is particularly regrettable because the book is intended not for the specialist but for the layman. It is a great pity that Bodmer did not take the precaution of becoming somewhat better acquainted with the elements of linguistic science before he imposed upon an uninformed public his burden of linguistic misconceptions and errors. Indeed, it might very well be said that *The Loom of Language* will become a source of considerable embarrassment to the author should he ever gain an elementary knowledge of some of the topics on which he has elected to write.

Though most conspicuous to the present reviewer, Bodmer's linguistic failings are not the only faults in *The Loom of Language*. Also questionable is his continued insistence that languages lacking flexions are easier to learn. Consider, for example, the following quotation (419):

Because other Aryan languages such as Danish, Dutch, or Persian have discarded so much of the grammatical luggage which their ancestors had to carry, it is possible to simplify the task of transmitting a working knowledge of them by summarizing the relatively few essential rules with which the beginner must supplement a basic vocabulary. There is no

royal road to fluency in a language which shares the grammatical intricacies of Sanskrit, Lithuanian, or Russian. It is therefore impossible to give the reader who wishes to learn Russian any good advice except to take the precaution of being born and brought up in Russia.

Here the author is on very questionable ground. No one, to my knowledge, has ever succeeded in demonstrating that one language is intrinsically more difficult to learn than another. It is true, of course, that for a native speaking English, there are differences in the ease with which he may acquire other idioms. But it does not follow that these differences can be correlated with anything more than the degree to which such idioms differ structurally from English. To assume that learning to use Greek, Russian, or Navaho requires the student to acquire a greater total amount of lexicon and grammatical data than would be required of a Greek, Russian, or Navaho who sought to learn English is somewhat naïve.

We may conclude with a word of warning. Bodmer's book, with all its linguistic and educational shortcomings, has an immensely wider circulation than treatises on linguistics by scholars of recognized competence. This is because Bodmer has had the courage, if not the competence, to relate the study of languages to the wider social problems which alone can justify linguistic research. As long as linguists fail to recognize such problems, and as long as they persist in publishing books which are unintelligible to a non-professional audience, so long will the layman and the student have to depend on the kind of linguistics Bodmer has to offer.

HARRY HOLJER
UNIVERSITY OF CALIFORNIA, LOS ANGELES

LANGUAGES FOR WAR AND PEACE. By MARIO A. PEI. Pp. 575. New York: S. F. Vanni, 1943.

This is a popular book, in both senses: it is addressed to a public of non-specialists; and it appears that many people have read it. There is no question of the need for popularizing our science. A book from which the educated layman could learn the aims and methods of present-day linguistics, written in the style of Whitney's classic popularizations,¹ would put all students of language in the author's debt. To many who have been looking forward to the appearance of such a book, Pei's work is a disappointment. He writes about languages, to be sure; but his book, far from giving the layman a taste of linguistic method, will give him, if anything, the impression that linguistics is the elementary Latin course that he dozed through in high school.

Why was this book written? It appears to serve no useful purpose; and the author's own words (Foreword 13-4) leave us in the dark, since their meaning is by no means clear and since the book, in any case, fails to keep the promise which they somewhat hazily imply:

The purpose of the present work is to present the main facts about languages, not in the form of a philosophical or psychological or literary essay, not from the historical and

¹ William Dwight Whitney, *Language and the study of language* (New York, 1867); *The life and growth of language* (New York, 1874).

scientific point of view, but as something of an immediate, practical value. The world's main languages and their geographical distribution, the linguistic families and the elementary relationships among their members, the identification of the written and possibly the spoken form of several important tongues, and lastly the description of the sounds and grammatical structure, together with a limited vocabulary, of seven of the world's most widely-spoken languages—all this will serve the purpose of giving the reader the elementary linguistic consciousness that the soldier of today needs in his military activities on foreign soil and that the man and woman of tomorrow will need in a world destined, by reason of the constant advances in our mechanical civilization and spiritual point of view, to become more and more a single political, economic and cultural unit.

Whatever this 'elementary linguistic consciousness' may be, it turns out that the book as a whole gives us nothing beyond the realization that many people speak no English, and that Americans may have trouble in talking to foreigners unless they know a foreign language. It is important to realize this, of course, and to adjust our educational system accordingly; but the point could have been made—so far as it is still not clear to 'the man and woman of tomorrow'—in a much smaller book.

What the author has actually done is to present an account of some 36 languages, in the spoken or the written form or in both (but always with the written form in the foreground), usually with statistics concerning the number and distribution of speakers. Seven of these languages are treated in separate chapters, at considerable length: German (123-66), French (183-224), Spanish (227-66), Portuguese (269-311), Italian (313-50), Russian (377-418), and Japanese (525-70). Twenty-nine others, grouped in chapters according to their historical or geographical relations, are disposed of in a shorter space. Altogether, the book displays great erudition and parades an imposing amount of miscellaneous information, much of it correct but none of it, as here presented, of any obvious use to anyone.

The extensive treatment of the major languages is justified by the following statement (15), which the author prints in capitals: 'The man who has some practical acquaintance with English, French, German, Spanish, Portuguese, Italian, Russian, and Japanese is, roughly speaking, in a position to make his way around the world.' Roughly speaking or not, it is hard to see what the author means by 'some practical acquaintance'; for even a careful reading of this book would scarcely equip anyone to make his way across the street.

The plan of the six chapters devoted to the major European languages is fairly uniform. Each one begins with a section on the number of speakers and their location; there follows a short, inadequate sketch of the sounds and the system of writing, separately or confused; the main division is a wooden synopsis of the morphology, differing from the traditional treatment in school grammars only in being less complete and less clear; the chapter ends with a classified vocabulary of words and phrases, whose usefulness, in the absence of any remarks on syntax, may at least be questioned. All forms are cited in the conventional orthography of the foreign language; the German and the Russian forms are further disguised by appearing in the native alphabets.

Our chief objection to these chapters must be, not that they misrepresent the languages described (though such a complaint would be justified here and there),

but that they fail to represent them at all in any useful or intelligible way. The author's whole approach to grammatical analysis—based always on orthography and following without originality or imagination in the clumsy footsteps of the textbook-writers—makes it impossible for him to present a clear picture of even those languages which are familiar to him at first hand. If he could have brought to bear on his problem a little independence of treatment, a little insight or sophistication, his learning might not have been all wasted.

As one result of the orthographic basis, sounds and spellings are hopelessly confused. All discussion of sounds starts from the letters of the native alphabet; and the descriptions given, when they have any ascertainable meaning at all, are the inept approximations and half-hearted fumbblings to which we have grown accustomed in fly-by-night 'self-teaching' handbooks. The following statements are typical:²

125: German vowel sounds are 'usually short when followed by a double consonant . . . ; otherwise long, especially if doubled or followed by *h*'.

126: German *ch* after *a*, *o*, or *u* is a 'harsh guttural sound'; after *e*, *i*, or a consonant it is a 'sound intermediate between *k* and *sh*'.

184: French vowel sounds are 'usually short . . . , but occasionally prolonged in stressed syllable; length is to be learned by observation.'

185: French nasal vowels 'occur, usually, when the vowel is followed by *m* or *n* in the same syllable To produce the nasal vowel sound, shut off partly the passage between nose and mouth as the vowel is uttered, and refrain completely from pronouncing *n* or *m*'.

186: French *h* 'is normally silent'.

314: 'Italian vowels have, whether stressed or unstressed, equal length.' If this means anything, it is perhaps that the greater length of stressed vowels in non-final free syllables is non-distinctive.

314: In Italian, 'in the groups *cia*, *cie*, *cio*, *ciu*, the *i* is almost silent'. Why this reluctance to admit that the *i* is wholly silent, a mere device for indicating the value of the preceding consonant letter?

315: 'Double consonants [in Italian] are more strongly pronounced than single consonants'. What reader will guess, unless he already knows some Italian, that 'strong' here means 'long'?

379: Russian *y* 'has no exact equivalent in English; it is best described as an attempt to pronounce *feed* with the front part of the mouth and *food* with the back part of the mouth, at the same time'. If this is really the best way to describe a vowel, three generations of scholars have worked in vain.

379: 'It is to be noted that all Russian vowels tend to have a less distinct enunciation when unstressed than when stressed; this is particularly noticeable in the case of *a* and *o*, which have practically the sound of the when unstressed.' The use of words like 'tend' and 'practically' in such a context betrays the gropings of the amateur.

380: 'Russian consonants . . . tend to become palatalized when followed by vowels containing the *y*-sound as their first element In many cases the palatalization is instinctive for an English speaker'. That is to say, if we may put the horse before the cart, the palatalization of consonants is indicated in Russian orthography by writing the following vowel with certain letters which are customarily transliterated in the roman alphabet as *ya*, *ye*, *i*, *yo*, *yu*. To restate the second sentence in meaningful terms is beyond the reviewer's capacity.

380: 'Final *voiced* consonants [in Russian] . . . tend to assume the corresponding *unvoiced* pronunciation'. That is, voiced stops and spirants do not occur finally, though some voiceless consonants in final position correspond to medial voiced consonants in related forms.

² A number of colleagues have called my attention to errors in the description of languages outside my competence.

In the domain of grammar, the presentation is vitiated once more by the author's inability to distinguish between language and writing. This blinds him, for example, to the importance of the phrase as a minimum unit of utterance in French; it prevents him from recognizing that certain orthographically separate words—like the definite article and the 'conjunctive' pronouns in several Romance languages—are bound forms; and it leaves him floundering in his discussion of liaison in French (186) because it obscures the existence of sandhi alternants. Moreover, the author appears to think that grammar—or at least that part of it which has 'an immediate, practical value' for someone trying to get 'some practical acquaintance' with a language—is a mere parade of paradigms. That some of the forms here given are rarely or never used in speech (cf. German *jener*, listed along with *dieser*, 135), or that scarcely anything is said concerning the MEANING of the cases, tenses, moods, and other categories, is fundamentally a more venial sin against grammar and good sense than the author's apparent faith in paradigms as a practical device for teaching the elements of a language. In short, his orthographic bias and his linguistic naïveté combine to produce a half-baked, indigestible pudding, thick with such plums as the following:

188-9: 'For nouns which in English are neuter, the article . . . indicates the French gender.'

189: 'Most French nouns form their plural by the addition of a silent -s.'

190, footnote to the phrase '*le garçon le plus intelligent de la classe*, the most intelligent boy in the class': 'Note the double use of the definite article, also the use of *de* for "in" after a superlative.'

191, footnote to a list of French numerals: '*Et* connects the two parts of 21, 31, 41, 51, 61, 71; hyphens connect the two parts of other compound numerals.'

388: 'The nominative [in Russian] is the case of the subject; it is also used in the predicate nominative, after the verb "to be" (the latter is generally understood, not expressed, in the present tense)'. Even in this book it is something of a shock to come upon the trick of explaining a sentence by the *deus ex machina* of missing elements 'understood'. In the example *где ваш отец?* 'Where [is] your father?', the spacing of the words seems to mean that the immediate constituents are *where your and father*.

390: 'the imperfective verb [in Russian] is usually a simple verb'. This is perhaps no more than a light-hearted inversion of the correct statement found in grammars, that a simple verb (i.e. one without a preverb) is usually imperfective.

The treatment of Japanese (contributed by Ralph Walker Scott) and of other less familiar languages is a *mélange* of traditional half-statement and folk mythology. We are accustomed to the superstitions about language current in the writings of dilettantes to whom it has never occurred to investigate the subjects they write on; it is not reassuring to find these superstitions repeated here without a smile. Even though it was not Pei's intention to write about languages 'from the historical and scientific point of view', surely we might have expected the author of such a book to be familiar with at least some of the results of linguistic science. Yet consider statements like these:

16: 'Some of them [languages of Africa, Australia, New Guinea, and the Pacific islands], though spoken by small and semi-savage groups, are of the highest interest to the professional linguist by reason of their peculiar structure, and to the psychologist and anthropologist because of the mental processes they betoken.'

21: 'The fact of the matter seems to be that races have an inherent tendency to become mixed, and languages to be borrowed, assimilated and appropriated by people who originally did not speak them.'

24: 'When we come to other linguistic families, . . . we meet a grammatical structure which bears no resemblance to ours. Japanese, for instance, utterly fails to recognize our concept of gender (masculine, feminine, neuter), and has very vague notions about number.'

82, on Melanesian Pidgin English: 'This linguistic form, which has in some localities become fully standardized and has even been reduced to rules of grammar and syntax, has forms fully as picturesque as those of China.'

436: 'Hungarian has two numbers and no concept of gender. . . . Officially, Hungarian has four "cases", nominative, genitive, dative, and accusative; in reality, . . . the actual number of case-forms in Hungarian equals or surpasses that of Finnish . . .'

486, on Dravidian languages: 'The accent is not very well defined, but mostly initial. . . . Distinction among the various parts of speech (nouns, adjectives, verbs) is not very well defined.' By whom?

496: 'Chinese compounds are numerous and varied; as many as four monosyllabic words sometimes go into the rendering of one idea.'

505: 'A very similar structure [to Siamese] appears in Burmese and Tibetan, which are monosyllabic and make use of word-order and tones to distinguish meaning.'

Apart from the myths enshrined in it, Pei's book may serve as a paradigmatic illustration of three approaches to linguistic description common in 'popular' and casual works. These are the Ripley, the Barmecide, and the Bullamacow.

The Ripley approach describes a language by listing oddities: the writer jots down, as they occur to him, whatever features of the language strike him as curious or amusing. Any feature that is not strange enough (from the viewpoint of his own language) to satisfy his taste for the marvelous is passed over as not worth noting. Here are two samples:

37: 'Ainu has a curious duplication of the French-Celtic expression for "eighty" ("four twenties"); Basque has a structure somewhat reminiscent of the polysynthetism of some American Indian languages (*ponet-ekila-ko-are-kin*, "with the one who has the cap", literally: "cap-with-the-of-with"); the Caucasian tongues enjoy an unparalleled richness of consonant sounds and grammatical genders, together with a peculiar structure ("I make my father happy" has to be translated by "through me—contented—makes—self—father"); some native Australian tongues can count only up to three, with the result that "seven" has to be rendered "pair-pair-pair-one", and "fifteen" by "hand-side-side-and-foot-half". (Some additional curiosities of Basque are listed on pages 452-3. None of the other languages described in this paragraph are mentioned again.)

66, on British dialects: 'The Shetland Islands pronounce "shall" and "should" as *sall* and *soud*. The western part of Scotland has *ba'el* for "battle" and *be'er* for "better". The Braid Scots dialect uses *lippen* for "believe", *aboan* for "above" and *till* for "to". Cornwall has *dafter* for "daughter". In Ulster, the demonstratives "that", "those" appear as *yon*, *thon*; in northern England, "these" and "those" are *thee*, *thir*, and in Wexford "this" or "that" is *thik*; the English Midlands use *chill*, *ged*, *wod* for "child", "get", "what"; Yorkshire has *hoo* for "she" and *han*, *liven*, *shan* for "have", "live", "shall"; Gloucestershire has *her* for "she" and *thak* for "that", while the southwest of England turns "parlor" into *palder*.'

The Barmecide approach describes a language by telling what it lacks: the writer picks out those features of his own language that are missing from the other, and builds his description on these. Thus, in the chapter on Japanese, the discussion of nouns (533-6) is divided into four parts: Number, Gender, Articles, and Cases. Under these heads we learn, respectively, that Japanese

nouns do not distinguish singular and plural ('The Japanese mind is not so much interested in number or quantity as ours'); that there is no grammatical gender; that the language 'has neither a definite nor an indefinite article'; and that the five 'cases' talked about are not cases at all, but phrases arbitrarily chosen among a much larger number of similar constructions for special treatment. A footnote to this section does not make things clearer:

The word "case" is not scientifically used, since Japanese could be said to have as many "cases" as there are separate postpositions [particles standing after nouns to show their syntactic function], and these are quite numerous; it is employed merely as a practical makeshift, designed to clarify unfamiliar Japanese syntax through familiar Indo-European terminology.

In other words, if a language is different from our own, we clarify it by pretending that there is no difference. Of the grammatical categories which do in fact apply to Japanese nouns, and of the way in which they are used in a sentence, there is not a word.

The Bullamacow approach describes a language by quoting samples from its vocabulary. Like the Barmecide approach, it points out that certain familiar grammatical categories are lacking in the language; but it goes on to explain that the language compensates for this lack by using separate words where one might have expected merely different grammatical forms. The typical case, of which Pei's book provides many instances, concerns gender. We are told, for example, that Japanese has no grammatical gender (534), but that the gender of Japanese nouns, instead, 'is determined by sex'—that is, that Japanese has separate words for 'bull' and 'cow', for 'cock' and 'hen', for 'man' and 'woman', for 'uncle' and 'aunt'.

This review may seem unduly long, since after all Pei does not offer his book as a contribution to linguistics. But it has another and equally valid claim to full discussion. It speaks about many languages with an air of authority; it is addressed to a public that cannot be expected to know the difference between a linguist and a polyglot; it is in tune with the currently fashionable interest in globalism. It is an important book, not to be dismissed as a mere potboiler beneath critical notice. In the hands of the public to which it is addressed, it is an active danger, potentially harmful as any book must be which brings a branch of science into contempt.

BERNARD BLOCH
YALE UNIVERSITY

HISTORIA DE LA LENGUA ESPAÑOLA. By JAIME OLIVER ASÍN. Fourth edition. Pp. 256. Madrid, 1940.

To the incompetent books on language written by beginners, well-intentioned amateurs, and professional popularizers must be added some contributed by otherwise intelligent writers who, under the strain of a political crisis, feel an urge to express themselves on issues which they are not prepared to discuss. Such publications are either disregarded by scientific journals or briefly listed as 'casualties'. Not so harmless is a misleading study that bears the name of a reputable author, especially if it enjoys wide circulation and is used in training

a generation of future scholars. If such a study is found to be lacking not only in information, judgment, and presentation, but even in sympathy with the generally recognized objectives of the chosen science, then its author must not be surprised to see his fellow-scholars react vigorously.

Oliver Asín is not unknown to Hispanists. His thesis on a group of military terms in Old Spanish traceable to the Arabic root *rbt* (University of Madrid, 1928)¹ has justly been acclaimed as one of the best lexical studies in the field.² The discussion was based on hitherto unexploited material; it was characterized by familiarity with Arabic sources and with Semitics, sound linguistic analysis combined with a knowledge of the historical background, unbiased approach to the conflict between Islam and Christianity, effective classification of the data, and a terse, sober style. Equally interesting briefer essays followed. The book under review, published for the first time in 1938 and, judging by the number of subsequent editions,³ eminently successful in Spain, has reached this country only quite recently. The reviewer read it with a feeling of profound disappointment: it contains a few excellent pages⁴ and some chapters possibly worth reading, but on the whole it is unquestionably a failure and may, in a sense, represent even a potential danger. Its inadequacy should not be blamed on the present situation alone; a few distinguished scholars now working in Spain have, under difficult circumstances, succeeded in producing works of enduring value.

The book falls into three sections: an essay on what is commonly called the external history of Spanish (11-140), and two brief chapters on phonology (142-61) and morphology (165-90). Appended to the book is a documentary section called 'anthology' (193-246). The author concedes (7) that the two technical chapters are merely résumés of discussions presented elsewhere in greater detail, but claims (8) that his is the first general outline of the history of Spanish. This is incorrect, since Entwistle's book (of whose existence he ought to have known through the review by G. Sachs in RFE 23.421-2) antedates his own by fully two years.

¹ J. Oliver Asín, *Origen árabe de rebato, arrobda, y sus homónimos: contribución al estudio de la historia medieval de la táctica militar y de su léxico peninsular*, BRAE 15.347-95, 496-542.

² See the criticisms of S. Gili Gaya in RFE 18.403-4, of G. Cirot in BHi. 32.274-6 and especially of C. Carroll Marden in Hisp. 11.216-8.

³ The first edition appeared in Pamplona in April 1938; the second in Zaragoza in October 1938; the third, thoroughly revised, in Zaragoza in September 1939; the fourth in Madrid in September 1940. There exists a sixth edition (Madrid, 1941), listed in the bibliography of the RFH, which the reviewer was unable to see. The copy used for the present review was lent by the Library of Congress.

⁴ Stimulating is the treatment of syntactic Arabisms in Alphonsine prose (60), of the survival of Spanish speech among the Moriscos exiled in 1609 (123-6), of Hispano-Arabic adverbs (188) and interjections (190). The references to the rôle played by the refranero in the formation of the literary language (85-6) are interesting. Of importance to the literary historian is the claim, supported by some evidence, that Juan de Valdés may have known Castiglione's *El Cortesano* (82), while Cervantes, counter to the belief of A. Castro, is in turn credited with knowledge of Valdés' *Dialogo de la lengua* (111-2). The years 1615-6 are convincingly shown to represent the culminating point in the expansion and prestige of the Spanish language (122-3). All these interesting passages deal with side-issues.

To facilitate orientation in the book, each paragraph has been given an appropriate heading; however, there are no indexes. No formal bibliography has been compiled, either; this deficiency would have been partially compensated by the copious footnotes, had these latter been worded less vaguely: all too frequently page references are lacking even in the case of works comprising several volumes. Not always have the best available editions of ancient texts been put to use (e.g. not in the case of D. Juan Manuel). There are a number of misprints, but neither these nor the exceptionally poor quality of paper can be held against the author.

The organization of all four major portions of the book shows serious weaknesses. Take, for instance, the anthology: the selection of some of the texts is felicitous, but it offers promiscuously two kinds of documentation which should have been strictly kept apart: on the one hand, notarial and literary texts whose authors unwittingly exhibit certain linguistic features, and, on the other hand, statements by grammarians, lexicographers, purists, and reformers bearing expressly on questions of language. The chapters on phonology and morphology are marred by the author's failure to use the asterisk when it is needed: thus, the students will believe that **admortificāre* (156), **impignus* (151), **insupīnāre* (152), **subsedicāre* (155) and similar (mostly unnecessarily) reconstructed bases represent recorded Latin formations. The macron has been left out in Latin words; there is no indication of the stress pattern; and the traditional symbols for closed and open vowels have not been used, not to speak of modern phonetic transcription. These two chapters do not measure up even to the standard of Alemany Bolufer's antiquated *Gramática histórica elemental*.

There are more serious flaws in the introductory outline, which the author kept elaborating for three successive years (8). In a history of the Spanish language the reader looks for information on the main stages of its growth. The subdivision into periods must be based on tangible material. To be sure, it may be tentative if this material is scarce or inaccessible, but at least a step must be made in the right direction. The outline under discussion falls into 14 chapters, which seems to intimate that the author assumes the existence of 14 successive linguistic periods. Let us look at some of these periods. The years 1516-55 are dealt with in the chapter The Speech of Castile as a Universal Language; the following four decades are discussed in the chapter Spanish as a Language of Science. Where is the contrast? Long after 1555 Spain remained a political leader, whose language was of international importance; and centuries before that date scientific treatises were composed in the vernacular. Another example of carelessness: chapter 2 is called The Language of Rome in Spain—First Century; chapter 3 is called Epoch of the Hispano-Christian Martyrs—Third and Fourth Centuries. Methodically these brief headings contain no fewer than three errors: first, the 2nd century has been completely left out of the picture; second, Hispanists are agreed that Ibero-Romance owes its peculiarity precisely to the Romanization of the peninsula as early as the 2nd century B.C.; third, the author would have obligated his readers (but has failed to do so, except for a reference to place-names bearing the name of a saint) by proving that the advent of Christianity marks a sharp break in the history of Spanish,

which alone would have justified the proposed subdivision. In line with this subjectivism is the distribution of space in his essay: 50 pages are devoted to the Classical ('Imperial') Age and barely 22 lines to the 19th and 20th centuries.

Students of literary style have recently given much attention to statements of the ancient critics, esthetic arbiters, and grammarians of Spain. Some of the evidence produced may be properly utilized by linguistic scholars, too, if these statements are constantly checked against data obtained from first-hand study of a wide variety of texts. Our author goes to the extreme of basing his judgment exclusively on these testimonials, thus unduly limiting himself to the study of the upper stratum of the language. As a consequence, he ignores (or rather is ignorant of) such processes as may have escaped the attention of 16th-century humanists, but certainly should arrest ours. There is no reference in his book to the syntactic changes recorded in Keniston's *Sixteenth Century Prose*; we do not hear how such basic words as *empezar*, *lindo*, *listo*, *mochacho*, *nadie*, *también* (to quote but a few) encroached on the territory of *comenzar*, *bien tajado*, *aparejado*, *mancebo*, *ninguno*, *otro*, although each of these shifts is of great interest to the lexicologist. Worse than this neglect is his avowed prejudice against 'modern' methods of research (as exemplified by Diez, Schuchardt, and Menéndez Pidal). This distrust of the advance of linguistic research, regrettable in a scholar trained by Spain's outstanding specialists, transpires, for instance, in the following verdict (119): 'Aldrete does not consider language as a purely physiological phenomenon, as does modern philology, but as a facet of literature and culture'.

Throughout, the book displays a devotion to nationalism and clericalism that is irreconcilable with the purposes of scientific analysis. To be sure, religious and patriotic motives have occasionally stimulated linguistic studies (witness Rheinfelder's *Kultsprache und Profansprache*, and Blondheim's work in *Judaeo-Romance*), but only as they have suggested certain topics or strengthened a worker's determination to carry through an inquiry at great sacrifice. If, however, a writer permits linguistic argumentation to yield to extra-scientific considerations, the value of his work is irreparably impaired. Gratuitous references to the Gospel (20), irrelevant quotations from the Psalms (80), the term 'providential' in characterizing the spread of Latin (29) and of Spanish (96) are some of the features not ordinarily found in historical grammars. Queen Isabel and the Bishop of Avila are said to have known in advance what languages were spoken by the tribes which Columbus was going to discover (75). In reference to the aborigines of Spain the author consistently uses the pronoun 'we'; he knows from Cicero that Metellus heard native poets in Cordova recite Latin texts with a distinctly 'Spanish' accent (23). Opponents of the school of thought that identifies present-day Basques with the ancient Iberians are charged with partisanship on political grounds (15-6); since some of them, like Bosch-Gimpera or Giera, are either exiled or reduced to the status of *personae non gratae*, this attitude does not seem to reflect traditional Spanish chivalry. Some neighbors of Spain are given preferential treatment; there is much talk of the affinity between Spanish and German blood and culture, yet significant contributions of German Hispanists like Baist, Lenz, Wiggers,

Rohlf, Krüger, Giese, Kuhn, and Meier are entirely unknown to the author, probably because of his prejudice against 'positive German philology', which appears to mean comparative linguistics. He makes no secret of his dislike of the French; this emotional attitude hinders him from recognizing and evaluating the scope of the Old Spanish borrowings from Gallo-Romance (144).⁵ In a similar way, extra-scientific considerations deter him from discussing Luso-Castilian and Catalan-Castilian relations, which are fundamental to the understanding of the Hispanic lexicon. Of the relative position of his own language he has a clear idea: Spanish is explicitly proclaimed to be the most beautiful language in the world (55), chiefly on account of the frequency of the vowel [a] (54), fittingly called 'the queen of the Spanish vowels' on the authority of the Italian adventurer Casanova. The 'exquisite artistic taste' (155) of the rugged primitive settlers of the county of Castile somewhere around the 9th century is exemplified by the change of the 'obscure and weak' [u] into [o]; no better example has been encountered to illustrate this exquisiteness than the shift *tauru* > *toro*, neither peculiar to Castilian nor illustrative of the phenomenon involved: neither Late Latin [tawru] nor Ibero-Romance [towru] contained any trace of an [u] in the stem. We may mention also a not precisely tasteful sensationalism in using as lexical material the names of present political leaders (35).

Among the several confusions noticed in this book there is one especially censurable, namely that between historical and normative grammar. The truism that it transcends the authority of a linguistic historian, while acting in this capacity, to impose certain norms acceptable to him or his like on the object of his studies, has never been fully appreciated in Spain, not even by Menéndez Pidal in the latest edition of his *Manual*. Our author goes to extremes again by distinguishing between 'correct' and 'incorrect' language (22), by discouraging any reform of spelling as conducive to cultural disintegration (120), and by circumscribing the limits to which borrowings from foreign languages may be tolerated (128). What he means by contending that a 'new style' will be shaped through comparative study of Latin and Spanish, the reviewer fails to understand (139). In concluding, the author suggests (140) that the time has come to exterminate all minor peninsular languages for the benefit of Castilian; this threat seems to extend to Catalan, the scientifically best explored of all peninsular dialects; to Basque, previously called 'a venerable relic of our national past' (19); and, by implication at least, to Portuguese.

The style of the book is not adequate to the purposes of a scientific treatise. Romance scholars have given many fine examples of their ability to treat linguistic themes with some measure of amenity, but, to achieve this and avoid trite rhetoric, the writer must combine a thorough command of the subject with unusually good taste. There is hardly a page in the introductory essay where one does not run across expressions like 'valiant warriors' (21), 'glorious names'

⁵ Except for the casual mention of two literary historians, there are no references to the work of American Hispanists or European Hispanists established in the Americas, like Solalinde and A. Alonso. Of the teaching of Spanish in this country the author has a queer idea; because a 17th-century textbook by Juan de Luna was critically edited by an American scholar in 1928, he assumes that it is still 'in use in English-speaking countries' (101).

(21), 'sublime ideals' (32), 'eternity' (32), 'patriarch of the Spanish culture' (38), 'grandiose energy' (54), 'marvelous theater' (62), 'gigantic representative' (69), 'supreme and definitive language' (82), 'egregious poet' (103), 'immortal work' (115), 'imperishable formula' (115), 'inimitable style' (116). The characterization of the language peculiar to individual writers, from Juan Ruiz (67) and Fernando de Rojas (78) down to Cervantes (111), Lope de Vega (121), and even the modernistas (138-9), shows no familiarity with methods of stylistic analysis, but is entirely on the level of journalistic art appreciation. Digressions on literary topics, inserted to make grammar more attractive, include whole lists of writers with the years of birth and death, irrelevant especially in the case of Moors who did not even write in Spanish (51, 56-7). To counter-balance the aridity of these passages, others have been included dealing in anecdotal tone with the private lives of the ancient grammarians (75-7). The whole is presented in a hitherto unknown spelling, which may interest our teachers of Spanish. It requires the capitalization of certain words like *Fe*, *Historia*, *Idioma*, *Lengua*, *Literatura*, *Patria*; interesting is the obligatory capitalization of *Español*, whereas the names of other nations and languages are spelled with small initial letters.

A miscellany of suggested corrections: The Roman poet Martial cannot properly be called an Aragonese (12). In the Augustan Age, Latin was not spoken in Dacia (21). The absorption by the largely Celtic inhabitants of Portugal and Galicia of Latin *f*- is irrelevant to the spread of this phoneme among Iberian tribes (24). Castilian is said to show no traces of Lat. *f*- except in modern learned formations (24); how about *frío*, *fuelle*? In Republican Latin the letter *v* (*u*) did not stand for the sound represented by *w* in German and by *v* in French (24). REW³ is not a posthumous work of Meyer-Lübke (26). *Tregua* is not incident to Ibero-Romance alone, cf. Fr. *trêve* (36). The question whether, around the 6th century, 'Spaniards' and 'Franks' understood each other makes no sense (37); at that period, Franks can be associated only with Goths and Gallo-Romans with Ibero-Romans. Hispanic prose is not a creation of Alfonso the Learned, although under him the prose style was standardized; cf. such earlier Aragonese works as the *Crónicon Villareense* and the *Vidal Mayor* (59). In likening American Spanish to Andalusian (62) and later to Toledan (88), the author fails to take account of recent researches by Henríquez Ureña and others. The claim that Latinisms were rigorously excluded from the language of Alfonso the Tenth and of D. Juan Manuel is an exaggeration (64); we can at best surmise that no new Latinisms were artificially introduced at that time. Inaccurate is the statement (68) that the influx of Latinisms is most strongly felt in Juan de Mena (1411-56), but that this tendency was overcome as early as 1438 in El Corbacho; why not say that there were conflicting schools of style throughout the 15th century? How could Fernando of Aragon, in marrying Isabel, have changed the destiny of the Spanish language by imposing his dialect on the court of the united kingdom (72), if Aragonese at that moment had been receding before Castilian for well over a century and was moribund, at least in the cities? The Sephardim were speakers of Hispanic dialects rather than of Castilian (74); being exempt from military service and lacking central organizations comparable

to the Court and the Church, they were less exposed to the influence of the standard language than were their Catholic contemporaries. Through the invention of printing, words and sounds (not graphs) are believed to have been immobilized (75). The introduction of poised diction (*sosiego*), recommended in El Cavallero Zifar of the early 14th century, is erroneously credited to Queen Isabel (77). *Exercito* replaced *hueste*, not *huestes*, and *desque* yielded to *desde que* rather than to *quando*, whatever Juan de Valdés may have thought four hundred years ago (92). Aldrete is called the precursor of 'modern philology' not only in Spain, but in Europe as well (119). The introduction of Gallicisms from the 18th century to the present day is ascribed to those whose chief interest in life is eating and drinking (128); there is no attempt to account for this phenomenon in terms of linguistics, sociology, or history of literature. Jacob Grimm turns out to be a great Hispanist (134), while Diez appears as the author of a 'Romantic' Grammar (135) in line with the definition of 'Romanticism' as 'inquietud universal en torno a España' (134). *Botica*, absorbed from Middle Greek, is listed under the Latin words which passed unchanged into Spanish (144). The absence of diphthongization in a stressed open vowel as due to a following *i* (whether sound or letter, is of secondary importance) is illustrated with *foveam* > *hoya* (147), while yod, the only appropriate term in this connection, is introduced in the chapter on morphology (177).

Castrocontrigo cannot possibly go back to *Castrum Guntherici* (161); the base should have ended in *-ico*, involving a dative of possession. There is no need to assume interference of *niebla* with *tenebras* > *tinieblas* (160) nor with the change of PN *Lebla* > *Niebla* (161). The suffix *-triz* does not date from the 17th century, in spite of Lope de Vega's statement (167): *emperatriz* was currently used in Old Spanish. The page on nominal suffixes (169) is rather unfortunate: *-eño* reflects *-ineu*, not *-ignu*;⁶ *-astro* appears to have penetrated through Italian, at least in its pejorative function; *-ucho* is definitely of Italian ancestry (in Old Spanish 'young eagle' was *aguiloch*); *-acho* existed in the old language as a meaningless variant of *-aço* (*aguacha* beside *aguaça*), but new strength was instilled into it through contact with Italian (cf. the spread of *borracho* and *mochacho* in the 15th century); *-ino* perpetuates both *-īnu* and *-īnu* and, precisely in the words *argelino*, *granadino*, *tangerino*, *tunecino*, which should have been of considerable concern to an Arabist, it most certainly represents a blend of Hispano-Moorish *-ī* and Latinizing *-ino*; cf. *alfonsī* beside *alfonsino* (which, in turn, led to *isabelino*, *manuelino*, *filipino*). On the same page, the author confuses *-ta* and *-erta* and selects the abnormal formations *fealdad* and *frialdad* to illustrate the function of *-dad*.⁷ Words derived by means of a prefix are called compounds (170). The *-i-* in *rostrituerto* is identified with the genitive ending of the *o* declension in Latin (170), and 74 formations are enumerated to explain this marginal type, in a book devoting 3 pages to word-formation. *Bastantear*, *tutear*, and *jalear* are separated from the verbs ending in *-ear* and classed with those in *-ar* (186). *Opus* > *huebos*, we are told, has disappeared because of the

⁶ See The Latin Base of the Spanish Suffix *-eño*, American Journal of Philology 65.372-81.

⁷ See a forthcoming essay on these two words, to appear in the University of California Publications in Linguistics.

conflict with *ōvum* > *huevo* (198); this is an example of the (now largely discredited) homonym theory at its worst, for, to begin with, there was no conflict at all, -b- and -v- having been distinct in Old Spanish; and even if a case of genuine homonymy were involved, similar words designating such widely different things as 'need' and 'egg' are not mutually exclusive. *Pora* is said to be a product of *per ad* (198); how about *pera* beside *pora* in Old Portuguese? *Fer* is traced back without qualification to *fác(e)re*, although a beginner knows that **facre* would have yielded **fagre*, while *facere*, normally developed, would have produced **fazre* (198). *Menbrado* in the *Cantar* is interpreted as 'digno de memoria, prudente' (199), as though men whose memory is perpetuated were necessarily cautious; the correct rendition is '(man) with a good memory, mindful'. Even worse is the explanation of *Cantar*, line 126: *Gradanse Raquel e Vidas con averedes* [misprint for *averes*?] *monedados*, accurately interpreted by Menéndez Pidal; according to our author, *gradanse* means 'they go away' and is a derivative from 'el inusitado lat. *gradi*' (199). *Riye* 'laughed' in the *Primera Crónica General* may be read either [rii'e] or [rije'], but this form cannot be said to be patterned on *riyo* < *rīdeo* (202).

The exiguous number of trained Hispanists from whom real progress in our field may be expected has become smaller through this book; an unusually promising scholar has ruined his career. Outside of Spain, Oliver Asín's book stands no chance whatever of being used by advanced scholars or of being recommended to students.

YAKOV MALKIEL
UNIVERSITY OF CALIFORNIA

DISCONTINUOUS MORPHEMES

ZELIG S. HARRIS

UNIVERSITY OF PENNSYLVANIA

This paper attempts to generalize the term MORPHEME so as to apply not only to sequences of successive phonemes but also to broken sequences. In so doing, it offers a method of expressing one of the possible relations between morphemes as previously understood.¹ The relation in question is that which obtains between two or more morphemes that always occur together (in a given environment). The essence of the method is that any two or more continuous morphemes which always occur together shall be considered to constitute together a single new morpheme. Since this relation between continuous morphemes is a type of grammatical agreement, the method here proposed obviates the necessity of separately treating this type of agreement.

1. It is convenient to summarize the forms that may be found among the continuous morphemes, so that we may see to what extent the new forms will differ.

Most morphemes in most languages have been described as sequences of consecutive phonemes: for instance /iŋ/ in *speaking, writing*.

Rarely, it is convenient to recognize a minus morpheme, which consists of the dropping of any phoneme occupying a particular position, e.g. the dropping of the last consonant, which constitutes a morpheme meaning 'masculine' in Bloomfield's analysis of French adjectives.²

Morphemes involving replacement of one phoneme by another may then be considered as consisting of the dropping of one phoneme and the adding of the other (i.e. as combinations of the first two types). Thus *men* contains two morphemes: *man*; and $-/\text{æ}/ + /e/$,³ which means 'plural'.

It is also necessary to recognize that some morphemes do not consist of the traditional phonemes at all, but of phonemic contours which may extend over many phonemes. An example is the rising intonation $/\text{?}/$ which indicates a question in American English.

Lastly, morphemes which are complementary to each other in distribution, and which satisfy certain other criteria, may be conveniently considered as being merely alternants (positional variants) of one morpheme. Thus the $/s/$ which occurs in *The book- are here*, the $/z/$ which occurs in *The boy- are here*, and the

¹ Where it is necessary to distinguish between morphemes recognized without applying the method here proposed, and the morphemes which result from the application of this method, the former will be called continuous morphemes, and the latter new.

² Leonard Bloomfield, *Language*.

³ Read: minus $/\text{æ}/$ plus $/e/$. In the pair *man* : *men*, it is of course arbitrary to consider *men* rather than *man* as containing two morphemes. We might have said that *man* consists of *men* plus a morpheme indicating 'singular'. We might also have said that *man* and *men* are two unrelated single morphemes. The choice among these ways of analyzing *man* and *men* depends on the relation of these morphemes to other morphemes in the language, and to the utterances in which they occur.

- /æ/ + /e/ which occurs in *The man- are here* may all be included in one morphemic unit {s}⁴ which has these three variants in these three environments.⁵

GENERALIZING THE MORPHEME DEFINITION

2.0. In this section it will be seen that the definition of MORPHEME as implicitly used by most linguists today can be extended to include discontinuous morphemes.

Why do we consider *paper* as one morpheme rather than two? Roughly, it is because every time the form occurs, with the meaning of 'paper', it is the whole phonemic sequence /peypər/ that appears; we do not find /pey/ without /pər/, or /pər/ without /pey/, yielding partial meanings whose combination, in the combined form /peypər/, would be 'paper'.⁶

In the continuous morphemes, the fundamental criterion which determines that the whole of a sequence of phonemes constitutes one morpheme rather than two, is the fact that the whole sequence occurs together in a certain class of positions and with certain meanings, and that parts of the sequence do not occur separately with parts of the total meaning of the sequence. Precisely this criterion is found to apply to what will be proposed below as discontinuous morphemes.

2.1. In some cases we have two unique (continuous) morphemes which always occur together, though not next each other. In Yokuts, whenever *na'aš* occurs, a verb with the suffix *-al* occurs with it; and whenever the verb-suffix *-al* occurs, *na'aš* occurs nearby. Together, they indicate uncertainty of the action; it would presumably be impossible to give the descriptive meaning of each one of them, since they never occur separately: *hina' ma' na'aš xat-al* 'Perhaps you might eat', *tunač na'aš so:g-al* '(He) might pull out the cork', *xatrat-al na'aš* '(He) might eat repeatedly'.⁷ Instead of saying that we have here two morphemes which always occur with each other, we can say that we have just one morpheme whose phonemes are not consecutive: *na'aš ... -al* (with the rarer variant *-al ... na'aš*). We thus obviate the need for a restrictive statement about the two continuous morphemes. Such simple discontinuous morphemes are infrequent.⁸

2.2. On the other hand, repeated (continuous) morphemes appear in many languages. In Gk. *σοφῶν ἀδελφῶν* 'of wise brothers', we have a continuous morpheme *ῶν* 'genitive plural' about which the special statement must be made that it occurs twice in this phrase. We might say: if *ῶν* occurs after *ἀδελφ-*, and if *σοφ-* occurs before, then *ῶν* will also occur after *σοφ-*; i.e. noun and adjec-

⁴ Braces { } will be used to indicate morphemic units.

⁵ See Z. S. Harris, *Morpheme Alternants in Linguistic Analysis*, LANG. 18.169-80 (1942), where it is shown that such groupings of morphemes into one morphemic unit can be performed, without arbitrariness or resort to meaning, on the basis of distributional criteria.

⁶ More rigorous criteria, with less reliance upon meaning, can be stated, but are not necessary for the present purpose.

⁷ Stanley Newman, *Yokuts Language of California* 120 (1944).

⁸ Leonard Bloomfield, *Language* 180. The late Manuel J. Andrade showed me in 1940 a similar case in his Guatemalan material.

tive agree as to gender, number, and case. However, since the two occurrences of $\omega\nu$ always appear together and are always identically replaced, as in $\sigma\phi\hat{\omega}\acute{\alpha}\delta\epsilon\lambda\phi\hat{\omega}$ 'to a wise brother', we might say alternatively: there is a morpheme $\dots\omega\nu\dots\omega\nu$ which occurs in $\sigma\phi\hat{\omega}\acute{\alpha}\delta\epsilon\lambda\phi\hat{\omega}$, and in other adjective-noun sequences; similarly, there is a morpheme $\dots\hat{\omega}\dots\hat{\omega}$, etc. When we say this, no special statement is needed about the concurrence of the two $\omega\nu$ forms: they occur together because they are parts of one morpheme.

2.3. This type of analysis does not require that the two parts of the morpheme be identical. In $\sigma\phi\hat{\omega}\acute{\alpha}\nu\delta\rho\acute{\iota}$ 'to a wise man', we say that there is a morpheme $\dots\hat{\omega}\dots\acute{\iota}$ which occurs in $\sigma\phi\hat{\omega}\acute{\alpha}\nu\delta\rho\acute{\iota}$, and in other sequences of adjective plus third-declension noun.

2.4. Following the practice of grouping complementary morphemes of identical meaning into single morphemic units, we consider such morphemes as $\dots\hat{\omega}\dots\hat{\omega}$ and $\dots\hat{\omega}\dots\acute{\iota}$ to be both variants of the dative (masculine) singular morpheme,⁹ the second variant occurring when the noun is of the third declension.

2.5. The single $\omega\nu$ which occurs in $\acute{\alpha}\delta\epsilon\lambda\phi\omega\nu$ 'of brothers', the $\dots\omega\nu\dots\omega\nu$ which occurs in $\sigma\phi\hat{\omega}\nu\acute{\alpha}\delta\epsilon\lambda\phi\hat{\omega}\nu$, and the $\dots\omega\nu\dots\omega\nu\dots\omega\nu$ which occurs in $\tau\hat{\omega}\nu\sigma\phi\hat{\omega}\nu\acute{\alpha}\delta\epsilon\lambda\phi\hat{\omega}\nu$ 'of the wise brothers', are all complementary to each other, since the first occurs only with single nouns, the second only with a sequence of two morphemes of the article, adjective, or noun class,¹⁰ the third only with a sequence of three morphemes of the article, adjective, or noun class. We may therefore say that $\omega\nu$, $\dots\omega\nu\dots\omega\nu$, $\dots\omega\nu\dots\omega\nu\dots\omega\nu$, etc. are all variants of one morphemic unit $\{\omega\nu\}$ 'genitive plural'. Which variant of the unit occurs depends on the environment, i.e. on the number of morphemes of the article, adjective, or noun class appearing together. Similarly, $\hat{\omega}$, $\dots\hat{\omega}\dots\hat{\omega}$, $\dots\hat{\omega}\dots\acute{\iota}$, $\dots\hat{\omega}\dots\hat{\omega}\dots\hat{\omega}$, etc. are all variants of one morphemic unit $\{\hat{\omega}\}$ 'dative (masculine) singular'; which of these variants occurs depends on the number and declension of the morphemes in the environment.

2.6. One of the major advantages of this method, i.e. of considering morphemic repetitions as variants of one morpheme, is the fact that the environment of each variant often turns out to be syntactically identical with the environment of every other variant of the same morphemic unit. The morphemic unit can in such cases be referred to the syntactic domain as a whole, while the particular variants of the unit each occur with particular morphemic forms of that domain. Thus the morphemic units $\{\omega\nu\}$ and $\{\hat{\omega}\}$ always occur over the whole of a noun phrase in Greek, and may in fact be considered suffixes of the noun phrase as such. If the phrase consists of only one noun, the variant is $\omega\nu$ (or $\hat{\omega}$). If the phrase consists of two stem morphemes—say adjective and noun or article and noun—the variant is $\dots\omega\nu\dots\omega\nu$ (or $\dots\hat{\omega}\dots\hat{\omega}$); and so on.

The syntactic domain of a repetitive morpheme may be more complicated. In the Semitic languages, the domain of the feminine morpheme and of the plural morpheme is the noun phrase and the following verb (or the preceding verb,

⁹ These morphemes can of course be broken down into case, number, and (usually) gender morphemes, but that is not relevant here.

¹⁰ E.g. it occurs also in $\tau\hat{\omega}\nu\acute{\alpha}\delta\epsilon\lambda\phi\hat{\omega}$, as in $\tau\hat{\omega}\nu\acute{\alpha}\delta\epsilon\lambda\phi\hat{\omega}\nu$ 'of the brothers'.

if there is no following verb within the clause contour). Thus in Modern Hebrew there are the following types of clauses:

<i>iš diber</i>	A man spoke.
<i>iša dibra.</i>	A woman spoke.
<i>iš cair diber.</i>	A young man spoke.
<i>iša caira dibra.</i>	A young woman spoke.
<i>iš cair mādaber.</i>	A young man is speaking.
<i>iša caira mādaberet.</i>	A young woman is speaking.
<i>iša caira dibra laiš cair.</i>	A young woman was talking to a young man.

The morphemic unit {*a*} 'feminine' consists of an /a/¹¹ repeated after each noun (including adjective) in a noun phrase and after the following verb. However, as the last example shows, the domain of the {*a*} does not extend to nouns following the nouns and verb.

3.0. A complicated example of discontinuous repetitive morphemes may be found in the Bantu languages. There every noun stem always occurs with a particular class prefix, and every adjective, pronoun, or preposition which follows it, and the verb whose subject the noun is, all have the same class prefix or one related to it. In Swahili¹² we find utterances like the following:¹³

1. <i>walikuža *wanawake wawili</i>	they-came women two (two women came)
2. <i>*watu wa-ulaa wamewanza</i>	people of-Europe come
3. <i>*mtu mwenye nguvu</i>	man having strength
4. <i>huyu *mke wa-žamaa yangu, amenambia</i>	this woman of-countryman mine, she-told-me
5. <i>*čio ča-'alimu čimekuiža</i>	school of-religion closed
6. <i>*mikono haina nguvu</i>	arms having-no strength
7. <i>hiki *kiti kizuri ča-ulaa, kimevunžika</i>	this chair fine from-Europe, it-got-broken

In each utterance, the word marked with an asterisk is a noun which occurs only with the singular or plural class prefix preceding it. The morpheme *tu* 'person' appears here after the singular *m* and plural *wa* ('person class'), as does the morpheme for 'woman'. The morphemes *io* 'school' and *ti* 'chair' appear after the singular *ki* (variant *č*: 'thing class'). The morpheme *kono* 'arm' occurs with the plural *mi* ('tree class'). The nouns which occur with a particular class prefix often have some aspect of meaning in common: e.g. those that occur with *m* and *wa* refer to human beings. The class prefixes may therefore be said to have this class meaning.

The other morphemes in the utterances listed above occur with various class prefixes, depending on the one that precedes the noun. The class prefix of the

¹¹ Or /et/ after the present tense morpheme.

¹² I am indebted to Nathan Glazer for obtaining these utterances from our informant, and for his valuable collaboration in the Swahili research of the Intensive Language Program of the American Council of Learned Societies.

¹³ The phonetic value of a space is to indicate loud stress on the second vowel before it. The letters may be pronounced with their usual values for an approximation to Swahili sounds.

noun is repeated before the adjective (as *wili* 'two', *zuri* 'fine'), before the verb whose subject the noun is (as *likuža* 'came', *mevunžika* 'got broken'; the variant of *m* before verbs is *a* as in *amenambia*¹⁴), and after any one of a class of demonstrative morphemes which includes the pronouns (as *hu* 'this', where *yu* is the variant of the class prefix *m*). The class prefix is also repeated before other morphemes, which make a following noun phrase into an adjective of the preceding noun phrase: *a-* 'of', *wenye* 'having', etc. Thus *ulaa* 'Europe', which can occur as a noun phrase by itself, combines with *a-* into *a-ulaa* 'of Europe', which has the syntactic position of an adjective and is preceded by a repetition of the class prefix of the noun before it: *watu wa-ulaa*, *kiti ča-ulaa*. The noun after *a-* has its own class prefix,¹⁵ unrelated to that of the preceding noun but repeated in any adjectives which follow the post-*a-* noun and refer to it: *žamaa yangu* 'countryman of-me' ('class 3' prefix *y* before *-angu*).¹⁶

3.1. It is possible to summarize all this by saying that the class prefixes have discontinuous forms. The prefix in utterance 1 above would be *wa... wa...wa...*, a variant of {*wa*} indicating person class plural; in utterance 3 *m... m...*, and in utterance 4 *...yu m... w... a...*, both of these being variants of {*m*} indicating person class singular; and in utterance 7 *...ki ki... ki... č... ki...*, a variant of {*ki*} indicating thing class singular. The domain of the discontinuous parts (whether repetitions or phonemically different parts) of the new morphemes could in all cases be summarized by saying that the parts of the new morpheme occupy as many of the following positions (marked by dashes) as occur in the utterance: demonstrative- noun -adjective -adjectivizer (+ noun) -verb. If any other morphemes occur, they do not affect the parts of the new morpheme. If various sections of this domain do not occur, the parts of the new morpheme which would appear with them of course do not occur either. We can now deal directly with our few discontinuous prefixes, the particular variant of each being always determined by the form of the domain. Given the prefix {*m*} indicating single human beings, if the domain is -noun the variant will be *m...*; if the domain is demonstrative- noun -verb, the variant will be *...yu m... a...*:¹⁷ thus if the environment is *-tu* we obtain *mtu*; if the environment is *hu- -ke -menambia* we obtain *huyu mke amenambia*.

Instead of having to describe special relations among the prefixes (e.g. between the *m* of *mke* and the *a* of *amenambia*) and the repetition of the class-prefix, we now list merely a few morphemes with somewhat complicated variants, which spread out over a syntactically recognizable domain.¹⁸

¹⁴ When an object of the verb is stated, its class prefix may also be repeated before the verb, after the subject class prefix.

¹⁵ In the case of *ulaa*, it is *u* ('class 6'). The noun *laa* occurs with the class prefix *u*. The sequence *a-ulaa* occurs with the class prefix of the noun which precedes it.

¹⁶ When a noun is followed by an adjective plus an adjectival noun phrase (i.e. a noun phrase preceded by *a-*), the adjectival noun phrase comes last. Hence there is no confusion as to whether an adjective refers directly to the head noun or to the noun that is preceded by *a-* (even if both are of the same class): if the adjective follows the *a-* noun, it refers to it.

¹⁷ Allowing for variations which depend on the particular demonstrative, etc.

¹⁸ These few discontinuous morphemes may indeed be considered to be the ultimate noun class of the language, since the nouns may be considered to modify these class prefixes in

3.2. One feature of special selection remains: particular nouns occur with particular class-prefixes. Even this limitation can be avoided by considering the class prefix, with all its discontinuous parts, as part of each noun.¹⁹ The morpheme for 'chair' is then not *ti* but {*kiti*}, where the *ki* part represents all the variants discussed above: e.g. in the environment *hi-* — *-zuri -a-ulaa* 'this fine — from Europe', the variant of {*kiti*} is ...*ki kiti ki*... č.... Similarly, the morpheme for 'man' is then not *tu* but {*mtu*};²⁰ and 'woman' not *ke* but {*mke*}, which in the environment *hu-* — *-menambia* 'this — told me' would be ...*yu mke a*...

If this combining of prefix and noun into one morpheme is carried out, it will be necessary to mention that most nouns in the language begin with one of only five phonemes (the others begin with the zero prefix which would not appear here), and that it is only the first phoneme or the first pair of phonemes which (with many variants) is repeated throughout the domain of the new noun.²¹ That is to say, all nouns have discontinuous repeated parts (varying with the environment), but there are only some six sets of discontinuous parts for each environment, and each noun has one or another of these six; which one it is, is indicated by the initial phoneme of the noun, since it is only that initial which (with its variants) is repeated. It will further have to be mentioned that most of the nouns that have a similar initial (the initial that repeats through the domain) also have some broad similarity in meaning: e.g. those whose repeated initial is *m* refer to human beings. This would be on a par with such facts as the meaning-element common to English morphemes which begin with *sl* (*slush*, *slide*, *slick*, etc.), though the Bantu correlation is far more thoroughgoing.

CONCLUSIONS

The considerations of §§2-3 show the possibility of a general treatment of morphemes which occur together.

4.1. Given some particular environment, if two morphemes *X* and *Y* depend on each other so that neither occurs without the other (in that environment), we say that *X* and *Y* constitute together one new morpheme *Z* which simply occurs in the environment.²² The environment may be stated in terms of particular morphemes, e.g. Swahili *hi-* — *-zuri* 'this fine —', or in terms of mor-

somewhat the same way that the adjectives modify the nouns. The formal relation, however, is not the same, since nouns are limited to particular class prefixes whereas adjectives are not limited to particular nouns.

¹⁹ I am indebted for this suggestion to Freeman Twaddell, and have also profited from a discussion of the question with Bernard Bloch.

²⁰ The 'person class' plural *wa* would have to be broken into two morphemes, one a plural having the same domain as the class prefixes, the other a variant of the 'person class' prefix which occurs only in the environment of the new plural morpheme.

²¹ Since the domain of the class prefix now becomes the domain of the noun, or rather of its first phoneme or two.

²² *X* and *Y* would traditionally be described as being in agreement. The present method replaces this agreement relation by a single morpheme *Z*. The method can clearly be extended so as to replace other types of grammatical agreement by single morphemes, but the results would not be as simple as in this limited type.

pHEME classes and syntactic constructions, e.g. demonstrative- (noun) -adjective. The more general the environment is, the greater advantage there is in combining X and Y, which are mutually dependent within it, into one morpheme Z. And the greater the variability of the environment (e.g. if it is a noun phrase which may consist of any number of nouns, adjectives, etc.), the more different types of repetition and variation of dependent morphemes are expressed by the single discontinuous morpheme. Thus the Swahili noun phrase may be *kiti* alone, or *hiki kiti*, or *kiti kizuri*, or *hiki kiti kizuri*, etc., and the discontinuous noun, whether {*kiti*} or any other, has corresponding variants for each form of the noun phrase.²³

4.2. An apparent loss of descriptive efficiency arises here. If each Swahili noun partakes of one out of only six repeated initials, does that not mean that the six initials are more general, and should be treated separately from the many individual nouns? But, for that matter, all Swahili morphemes partake of only some 21 phonemes; yet we do not on the whole consider the phonemes to be general classifiers of morphemes. It is true that we discuss the phonemes independently of the morphemes, and similarly we should discuss the repeated initials independently of the individual nouns. But we should discuss them merely as a feature of the phonemic composition of a class of Swahili morphemes, namely the fact that these morphemes are discontinuous and that the discontinuity consists in the repeating of the initial (or of a substitute for it) in stated positions throughout a certain domain. All this does not require us to set up the repeated initial as a separate morpheme.

The fact that these repeated initials often have an element of meaning—the meaning common to all the nouns that begin with them—permits us to set them up as separate morphemes only if we are prepared to set up the *sl* of English *slide*, *slick*, etc. as a separate morpheme on a similar basis.²⁴ If we wish to recognize such formally dependent but semantically general elements as morphemes, we should reject the extension of §3.2. However, we should keep the basic method of §3.1, which places the agreeing morphemes into one repeated morpheme.

4.3. The condition stated in the first sentence of §4.1 is exactly that which determines whether two consecutive phonemes are parts of the same morpheme. The new discontinuous morpheme is thus distributionally the same as the old continuous morphemes. The only difference between new and old is in the very feature which distinguishes them, i.e. in their continuity. The difference in continuity, therefore, does not correlate with any other difference between them, and in the new definition, which takes no note of continuity, the continuous morphemes are merely a special case, and a simple one, of morphemes as a whole.

²³ The fact that we have to state the environment in order to know the form of our discontinuous morpheme in each particular occurrence, means that the environment functions as an independent factor in determining the variant of our new morpheme. Therefore it is possible to generalize the present method, and to take any two morphemes, and treat any factor which determines their coexistence as part of their environment. However, it is descriptively advantageous to do so only if the environment or the variation is of a general character, or correlates with other features of the language.

²⁴ With a by-product of such forlorn morphemes as *-ide*, *-ick*, etc.

PERSIAN *čiz* AND SANSKRIT *kim*

P. TEDESCO

YALE UNIVERSITY

[Turfan Median *kēč* 'somebody' is probably **kahyačit*, and Persian *čiz* 'something', **čahyačit*; Skt. *kim* 'what' is a Middle Indic form; the IE interrogative was probably **kʷos* 'who' (stem **kʷo-*) and **kʷid* 'what' (stem **kʷi-*).¹]

1. The Middle West Iranian Turfan manuscripts, as is well known, are composed in two languages: a Northern (Median), and a Southern (Persian),² here noted as North (N) and South (S).

For 'something, anything'—Avestan *kačit*,³ OPers. *čiščiy* (from **čisčit*, earlier **čitčit*)—these manuscripts have N *čiš* (*čyš*), S *tis* (*tys*) (Dial. §21a). For 'somebody, anybody'—Av. *kasčit*, OPers. *kaščiy*—the forms are N *kēč* (*kyč*), S *kas*.

In F. W. K. Müller's texts N *kēč* occurred only once: 47 a 12 *kw kyč h'ws'r ny 'st* 'so that there is none equal', and I did not recognize it there. I thought, therefore, the North word for 'somebody' was not attested, and on the base of the correspondence N *paš* : S *pas* 'afterwards' for Av. *pasča*, OPers. *pasā*,⁴ I posited (Dial. 209) the North form of **kasčit* as **kaš*.

However, in Andreas-Henning's *Mitteliranische Manichaica* iii (1934) there appeared several occurrences of *kēč* which made it clear that this is the North equivalent of *kas*; e.g. b 10 'wd *čy tw 'w 'ny kyč 'bwyn'h wxd m' kr* 'and what you blame in another, do not do this yourself', or e 91 'w *hrw qyč bwd 'yy n'mgyn* 'you were famous to every one'.

2. What is this *kēč*? Henning, in a footnote of *Manichäisches Bet- und Beichtbuch* 96 (1937), equates it with Av. *kasčit*, implying a change of *sč* to *šč* and *č*, and of the preceding *a* to *ē* or *i*. However, N *paš* and *čiš* for Av. *pasča* and OPers. *čiščiy* show that Iran. *sč*, OPers. (Northwestern) *šč* become Turf. Median *š*. *Kēč* might be a loan from another dialect, but I do not think the change *sč* > *č* occurs anywhere in West Iranian.

There seems to be another possibility. The Middle West Iranian pronouns largely represent the form of the old genitive. N, S *amāh* 'we' and N *išmāh*, S *ašmāh* 'you', both words nominative and oblique, are OPers. *amāxam* (Av. *ahmākəm*) and the *x*-variant of Gāth. *xšmākəm* respectively; S *ōy* ('wy) 'he', nom. and obl., is OPers. *avahyā*. N and S *kē* 'who' and *čē* 'what', both words nom. and obl., are **kahya* (Gāth. *kahyā*, YAv. *kahe*) and **čahya* (only Gāth. *čahyā*).

¹ I am again indebted to Professor Franklin Edgerton for valuable remarks.

² Cf. Tedesco, *Dialektologie der westiranischen Turfantexte*, *Monde Oriental* 15.184-258 (1921, appeared 1924), henceforth quoted as Dial. The reasons for the designation of the North Dialect as Median, not Parthian, I hope to set forth sometime in the future.

³ Bartholomae, *Altiranisches Wörterbuch* (henceforth quoted Wb.) 425 top.

⁴ The difference between OPers. *kaščiy*, *čiščiy* (with *šč*), from **kasčit*, **čisčit*, and *pasā* (with *s*), from **pasča*, as shown Dial. 210, is due to dialect mixture: *s* is the genuine Persian, and *šč* a Northwestern development.

Now if *kē* itself is the old genitive, then its *čit*-compound may be the same: *kēč* probably is **kahyačit* (Av. *kahyāčit*). **Kahyačit* became **kēhač*, **kēhč*, and *kēč*, perhaps with some aid from the simple *kē*. The preservation of intervocalic and final *č* is normal in North and South, cf. N and S *wičēh-* 'to teach', N and S *rōč* 'day' etc. (Dial. §4).

N *čiš* 'something' and *kēč* 'someone', then, would represent different cases: the former (**čisčit*) the nominative, the latter (**kahyačit*) the genitive. This seems at first a little strange. But, on the other hand, N *kēč* agrees in the case form with *kē*, while S *kas* and *kē* reflect different cases (nominative and genitive). Besides, the case difference *kēč* : *čiš* has an exact counterpart in Sogdian: here 'who' is *kē* (**kahya*), genitive; but 'what' is *ču*, a transformation of **čit* after the normal neuters in *-u* (**-am*) (BSL 25.55), therefore nominative. Further, in the Turfan Median demonstrative, *hau* 'that one, he' is the nominative OPers. *haw*; but *im* 'this one' is **imahya* (for older **ahya*);⁵ the nominative **ayam* would be **ē*.

3. Moreover, the neuter of the *čit*-indefinite, too, seems to have a genitival variant. In New Persian, 'something' is *čiz*. This form differs both from Turf. Med. *čiš* and Turf. Pers. *tis*.

Bartholomae, Grundriss §242 and again Miran. Mundarten 4.11 fn., separated *čiz* from the **čitčit*-forms and explained it as the neuter plural **čī-ča* (Gāth. *čī-čā*) or **čī-čit*. Hübschmann, IF Anz. 10.29, trying to keep the common base form, started from a dialectic 'OPers. **čiččiy*', different from the Achaemenid *čiščiy*. I myself, Dial. 211, followed Hübschmann, referring NPers. *čiz* to a Northwest dialect, in which **čitčit* did not become **čisčit*, but **čiččit* and **čičit*. But the assumption of such a development is without support; and so is a change *sč* > *šč* > *č*.

Rather another solution now suggests itself. Just as Turf. Med. *kēč* is **kahyačit*, NPers. *čiz*, through older **čēč*, is **čahyačit*. NPers. *kās* 'some one' and *čiz* 'something' would again represent different cases. But contrary to Turfan Median, with 'someone' (*kēč*) genitive and 'something' (*čiš*) nominative, here 'someone' (*kās*) would be nominative, and 'something' (*čiz*) genitive.

Pre-NPers. **čēč*, differing from both Turf. Pers. *tis* and Turf. Med. *čiš*, but agreeing with Turf. Med. *kēč* in its genitival origin, is probably from the Northwest, although from another dialect than Turfan Median. It might also have been a dialectal variant within Persian proper (**čēč* beside *tis*), but here, owing to the smaller area, dialectal differences are rarer than in Median. Probably in Median, possibly in Persian also, the *čit*-indefinite long preserved both cases: nom. **kaš* (*kas*) and obl. *kēč*; nom. *čiš* (*tis*) and obl. **čēč*, and the final selection of one form took place only late and differed from dialect to dialect.

4. OPers. *kaščiy* 'someone' / *čiščiy* 'something' and the corresponding Middle West Iranian forms presuppose an opposition **kah* 'who' : **čit* 'what', stem **ka-* in the masculine, but **či-* in the neuter. This opposition is not found in Avestan (cf. §5 below), but reappears outside Iranian: Slavic has *kz-to* 'who', but *čz-to* 'what', and Armenian has *ov* 'who' (**kos*), but *z-i* 'what' (**kid*; *z* is preposition).

⁵ Cf. Pāli etc. *imassa* below, §14 end.

A similar opposition exists in the genitive. MWIran. *kē* 'who' and *čē* 'what' presuppose masculine and neuter genitives **kahya* and **čahya* respectively. This opposition again recurs in Slavic and Armenian: in the former, 'of whom' and 'of what' are *kogo* and *česo*, in the latter *oyr* (**kosyo-r*) and *ēr* (**kesyo-r*).⁸

The same stem difference between the two genders as in Old Persian and Middle West Iranian appears in Middle East Iranian, here distributed between two cases: Sogd. *kē* 'who' is **kahya*, but *ču* 'what' is a transformation of **čit* (§2 end). Saka, with *kye*, *ce* 'who' and *cu* 'what', obliterates the difference by secondary palatalization in **kē*.

5. Strangely, while Old Persian and the whole of Middle Iranian thus clearly oppose **kah*, **kahya* 'who' to **čit*, **čahya* 'what', and this opposition recurs in Slavic and Armenian, it is not shared by the oldest form of Iranian, Avestan.

In the Gāthas⁷ 'who' is normally *kā* (e.g. Y. 44.5 *kā ... raočāsčā dāṭ tamāsčā* 'who created light and darkness?'), but once *čiš* (Y. 43.7 *čiš ahī kahyā ahī* 'who are you? to whom do you belong?'), and the simple indefinite after negative is *čiš* (Y. 31.18 *mā čiš aṭ vō ... gūštā* 'nobody of you may listen'); 'what' is *kaṭ* (e.g. Y. 34.12 *kaṭ vaštī* 'what do you want?').

The Younger Avesta has both *kō* and *čiš*, *kaṭ* and *čit*. In interrogation the normal forms are *kō* and *kaṭ*; interrogative *či-* is rare: *čiš* V. 9.51 *čiš hāu as ... yō* 'who was this who ...?', adjectival H. 2.10 *čiščā čarāitiš ahī* 'and what woman are you?';⁹ *čit*, twice, is both times adjectival: Y. 9.3 *kā ahmāi ašiš ərənāvi čit ahmāi jasaṭ āyaptəm* 'what lot was granted to him, what fortune went to him?' (contrast *kā* and *čit*), Y. 19.1 *čit awaṭ vačō ās* 'was war das für ein Spruch?'.¹⁰ On the other hand, *čiš* and *čit* are regular as simple indefinite after negative (*mā čiš*, *nōiṭ zī čiš*, *naēda čiš*,¹¹ e.g. Y. 9.21 *mā čiš paurvō būdiyaēta nō* 'nobody may first perceive us'), and this is also the place of the rare doublets *čahmi* and *čahmāi* for *kahmi* and *kahmāi*.

Gāth. *čahyā* seems to occur only twice:¹² Y. 48.9 *kadā vaēdā yezī čahyā xšayaθā*

⁸ For the Armenian forms cf. Meillet, *Esquisse* 61, ² 87.—Bonfante, *JAOS* 64.183 fn. 71, sees in Armen. *o-* not **kʷo-*, but **jo-*; erroneously, for **jo-* nowhere becomes interrogative or indefinite.

⁷ Cf. Bartholomae, *Grundriss* §415; Wb. 422–7; Wackernagel–Debrunner 3. §258, especially γ, note.

⁸ Wb. 426 middle.

⁹ Wb. 424 middle.—Thrice *čiš* occurs as a neuter: V. 5.50, 18.36, and N. 72 (*čiš zaotarš kairim aṭhaṭ* 'what is the zautar's business?'), cf. Wb. 423 and 427, no. 2. This phenomenon, too frequent to be dismissed as a mere corruption, is the more strange as all of Middle Iranian (Persian, Median, Sogdian, and Saka) distinguishes 'who' and 'what'. But considering the texts where it occurs, this neuter *čiš* cannot be something archaic, as Vaillant, *BSL* 37.104, believed. Rather, Middle Iranian 'poets', whose language had *č* only in the neuter, used indiscriminately all forms with *č*, *čit*, *čiš*, and (see below) *čim*, for 'what'. The Late Avestan increase of *či*-forms for *kaṭ* is Middle Iranian. But *čit* as opposed to *kā* in the old passage Y. 9.3 (see above) is probably archaic: the old **čit*, anterior to *kaṭ* (§7), seems to have subsisted longer as adjective than as substantive.—An interrogative acc. masc. *čim* occurs in Y. 19.20 and 20.4 (so), two worthless passages; as acc. neuter, Y. 62.8.

¹⁰ Wb. 423 bottom.

¹¹ Wb. 426 middle.

¹² Wb. 426 bottom, 427.

... *yehyā mā āiθiṣ dvaēθā*, according to Bartholomae, Die Gatha's: 'Wann werde ich erkennen, ob Ihr über Jedweden Macht habt, von dem mir Verderben droht?' (just so Lommel¹³); and Y. 50.1 *kaṭ mōi urvā isē čahyā awaṇhō*, Bartholomae, Wb. 26: 'Ob meine Seele auf irgend welche Hilfe zu rechnen hat?' (adjective neuter), but Die Gatha's: '... bei irgend wem auf Hilfe zu rechnen hat?' (subst. masc.); Lommel, op.cit. 149: 'Über was an Hilfe und von wem verfügt meine Seele?' (interrogative subst. masc.).

Cahyā might be neuter in either passage, taking Y. 48.9 as '... whether you have command of anything', but might also be masculine, 'of anybody', with *ča*-form after 'whether' as in the negative sentences (cf. *čahmāi* above); Lommel's interpretation (Y. 50.1) as interrogative masculine, equal to *kahyā*, also is not impossible, for Gāthic has interrogative *čiš* beside *kē*.

The gender of Gāth. *čahyā* is, therefore, uncertain.

6. The characteristic features of the Avestan system, *kō*, *kaṭ* (contrasting with later Iran. **ci*), and indefinite *mā čiš*, *nōiṭ čiš*, recur in the oldest Indic. Rigvedic has *kāḥ/kāt* and indefinite *mā-kiḥ* 'ne quis, ne', *nā-kiḥ* 'nullus, non'.¹⁴ But beside *kāt* there is *kīm*. The ratio of *kāt* to *kīm* is 2 : 3 for the pronouns alone,¹⁵ and 3 : 5 for pronouns and particles combined. *Kāt*, according to Wackernagel, is equally often substantive and adjective, but *kīm* is preponderantly substantive (26 : 9). Within the Rigveda, *kāt* is the older and *kīm* the later form;¹⁶ *kāt*, like the indefinite *-kiḥ*, does not go beyond the Rigveda; the later language has only *kīm*.

The origin of *kīm* is problematic. Its base no doubt is **ci*, equal to Lat. *quid* etc., still preserved in the particle *ci*. This **ci* was, as a pronoun, transformed into **kit*, just as **na-ciṣ* was into *nā-kiḥ*. But how did **kit* become *kīm*? The *-m* differs both from the neuter pronouns, with *-i* (*tāt*, *yāt*), and from the nominal *i*-neuters, with *-i* (*hārdi*). The common explanation, from Bopp on,¹⁷ is that *-m* is from the nominal *a*-neuters (*phālam*). That this somehow is its ultimate origin cannot be doubted. But how did *-m* come from the nominal *a*-stems to a pronominal *i*-stem, with the exclusion of the pronominal *a*-stems? The situation, strangely, is this:

neuter	nouns	pronouns
<i>a</i> -stems	<i>phālam</i>	<i>tāt</i> , <i>yāt</i>
<i>i</i> -stems	<i>hārdi</i>	<i>kīm</i>

If the neuter *a*-nouns (*phālam*) did not influence the *a*-pronouns (*tāt*, *yāt*), how can they have influenced the *i*-form **kit*? On the other hand, *kīm* cannot have

¹³ Göttinger Nachrichten, Philol.-hist. Kl., Fachgruppe 3, Neue Folge 1.131 (1934).

¹⁴ Once interrogative *kiṭ* 10.52.3, Wackernagel 3.559.

¹⁵ Macdonell 303 fn. 7.

¹⁶ Grassmann 307 (1873): "*kīm* (das ältere *kād* allmählich verdrängend)".—Lanman, Noun-Inflection (JAOS 11) 377 (1880): "*kīm*, which is gradually supplanting the more antique *kād* even in the Veda [is perhaps a phonetic variation of **kā-m*]"'.—Arnold, Vedic Metre 30 (1905), quotes *kāt* as indicating early date; but *kīm*, correctly, is not named among the forms which indicate late date (§86).

¹⁷ According to Wackernagel 3.562.

its *-m* from the neuter *i*-nouns (*hārdī*), for these have none. Wackernagel 3.562 sets forth the problem and reports previous theories, but gives no explanation himself.¹⁸

I think *kīm* is a Middle Indic form. In Middle Indic, all neuter pronouns have *-m*: Pāli e.g. has *taṃ, yaṃ, kiṃ* etc. Rigvedic *kīm*, therefore, coincides with Pāli *kiṃ*, and is to the posited **kit* just as Pāli *taṃ* and *yaṃ* are to Rigvedic *tāt* and *yāt*. RV *kāt* is Old Indic, RV *kīm* is Middle Indic; but *kīm* is not the Middle Indic form of Old Indic *kāt*, but of an unattested Old Indic **kit*.

Did, then, Middle Indic **kim* exist already in Rigvedic time? And how did it come into the Rigveda? Why has the Rigveda a Middle Indic form only of **kit*, and not of the other neuter pronouns?

The Middle Indic replacement of *tāt, yāt, *kit* by *taṃ, yaṃ, kiṃ* may be conceived so that **tat phalam* and **kit phalam* were transformed into **tam phalam* and **kim phalam*. But in the *a*-adjective the neuter ending *-am* was inherited (*śukrām*), while in the *i*-adjective Old Indic had only the mere stem (*śuci*); therefore, **tam* for *tāt* must have arisen earlier, and have been carried through faster, than *kīm* for **kit*. A dialect which had *kīm* must, consequently, also have had the neuters **tam* and **yam*. Why, then, has Rigvedic *kīm*, but *tāt* and *yāt*? An answer will be attempted in §11.

In any case, *kīm* presupposes **cit*. The Sanskrit couple *kāh/kīm*, therefore, preponderant in the Rigveda and exclusive after it, is one more instance of the opposition **k^os* 'who'/**kⁱd* 'what'. The internal distribution of the forms, in Indic as in Iranian, would at first seem to indicate that the oldest word for 'what' was *kāt*; but *kāt* may easily be an innovation to *kāh*.

7. The opposition **k^os* 'who'/**kⁱd* 'what' appears, therefore, in four languages: Slavic, Armenian, Iranian, and Indic, nearly the entire satəm-group; in the first three languages, the opposition in the nominative is, besides, accompanied by an opposition **k^oso* 'of whom'/**kⁱes(χ)* 'of what' in the genitive.

These agreements have not attracted much attention; the genitive oppositions **k^oso*/**kⁱes(χ)* have not been connected, and of the nominative oppositions

¹⁸ He compares the Rigvedic enclitic particle *kīm*, with long *ī*: *mā-kīm* 'ne' 6.54.7 (*mākir nešan mākīm riṣan mākīm sām śāri kevaṇe* 'none [of the cows] may be lost, none may be harmed, none be crushed in a ravine'), 8.45.23, *nā-kīm* 'non' 8.78.4,5, *ā-kīm* 'from' 1.14.9, to which corresponds Av. *-čīm* (YAv. *mā-čīm*, Gāth. *naē-čīm*, YAv. *naēša.čīm*). But I do not think this word is identical with *kīm* 'what'. Rather, if we can neglect the long *ī* (as does the comparison with *kīm* 'what'), the close connection with *mā-kiḥ* and *nā-kiḥ* and the fact that, like these, *-kīm* does not go beyond the Rigveda, point to a stereotype acc. masc. **kīm* (= Av. *čīm*, Gk. *τι-ά*).—The other Av. *čīm*, 'why', only twice in the late Aogama-dačā, is perhaps the Middle Iranian form of the ablative **čahmāi*, just like (according to Bartholomae, WZKM 30.34) MPers. *čim* 'reason'.

Meillet's equation of Armen. *iñč* 'something' with Skt. *kīm cit* (cf. Brugmann, Grundriss² 2.2.358, Wackernagel-Debrunner 3.562) is still attractive. It would presuppose that the phonetic development of *k^o* before *i* was *č* (hence *č* in the particle), and that in the pronoun Pre-Armenian replaced **či-* by **ki-* after the analogy of **kos* 'who', just as Sanskrit did. *Z-i* 'what' would then be from older **in*. But even if this derivation were correct, it would not yet establish an 'IE' neuter **kⁱm*. Rather Pre-Armenian **kim* would be a secondary transformation of **kid* just like Skt. *kīm* (see next paragraph).

k^os*/kⁱd* only two have been compared: those of Slavic and Armenian, by Meillet, *Le slave commun*² 442-3.

He noted the agreement of distribution between Slavic *k^oto*/*č^oto* and Armenian *ov/i*, but thought it was coincidental, each opposition being secondary and having developed in each language independently. In his opinion, Indo-European originally had both **k^os* and **kⁱs* for 'who' and **k^od* and **kⁱd* for 'what'; and when, by the loss of the finals, the equivocal forms fell together, both Slavic and Armenian selected one stem for each gender: **ko-* for 'who', but **ki-* (**či-*) for 'what'.

This interpretation was understandable, when the opposition was noticed only in two languages; but now that it appears in four, independent parallel development is no longer likely. If this were merely a later selection for the sake of differentiation, why have we only **k^os*/**kⁱd* and no **kⁱs*/**k^od*? The idea of differentiation also no longer holds good throughout; this process would indeed have been necessary in the Iranian *čit*-indefinite, where **kasčit* and **katčit* would have coincided phonetically in **kasčit*; but not in RV *kāḥ* and *kāt*.

It seems, therefore, that the distribution **k^os*/**kⁱd* has to be referred to Proto-Indo-European, at first as a dialectic feature, perhaps of the satəm-group. But it is not unlikely that this was the original structure of the interrogative in the whole of Indo-European. For the equivalent coexistence of **k^o-* and **kⁱ-* forms in both genders (**k^os* and **kⁱs*; **k^od* and **kⁱd*), though commonly accepted, is not satisfactory. Rather it seems that the two themes were originally distributed between the two genders, animate and inanimate, 'who' being **k^os* and 'what' being **kⁱd*. This distribution appears in another pronoun in Hittite: the demonstrative *kas* 'this' (gen. *kel*, dat. *ketani* etc.) has the neuter *ki* (Sturtevant §251 and §271).

The different forms—on the one hand Hitt. *kwis*, Tokh. *kus*, Gk. *τⁱs*, and Lat. *quis*, on the other Goth. *ha* and OPruss. *ka*—may be due to secondary transformation: the **kⁱs*-forms, after the analogy of **kⁱd*: Hitt. *kwit*, Tokh. *kuc*, Gk. *τⁱ*, and Lat. *quid*; the **k^od*-forms, conversely, after the analogy of **k^os*: Goth. *has* and OPruss. *kas*.¹⁹

This leveling may in part go back to dialectic Proto-Indo-European; on the other hand, it could take place at any time in any single language or dialect. The arising doublets could be differentiated functionally: e.g. in Latin the original *quid* remained interrogative, but the new *quod* became relative (and adjectival interrogative).

That the difference between 'who' and 'what' is deeper than the common difference of gender, is shown by Armenian. This language otherwise has no gender, but it distinguishes 'who' and 'what'.

For this point, then, the languages which best preserve the original state, would, against expectation, be the central ones, Slavic and Armenian, and next to them the Southeastern, Iranian and Indic.²⁰

¹⁹ Lithuanian-Latvian has *kās* for 'who' and 'what'.

²⁰ Some more recent views on the relation of the stems **k^o-* and **kⁱ-* are Leumann's, Lat. Gram. 288 (1928): "Idg. **q^o-* ist wohl eine Umgestaltung von **qⁱ-* nach **to-*" (but contrast Gk. Hom. *τ^εο* : *τ^οι^ο*, Slav. *česo* : *togo*, Goth. *has* : *sa*, *ha* : *pata*); Benveniste's,

8. The genitive opposition masc. **k^uosio*/neut. **k^ues(̂)o* has much less chance of being original. For **k^uesio* seems to have an inherited place in the masculine. Gāth. *čahyā*, as shown above (§5), is dubious, and the both masculine and neuter value of Gk. *τεῦ* (*τέο*) would not be decisive, because Greek obviously has eliminated the *πo*-forms from the pronoun; but Goth. *his*, masculine and neuter, with *i* as against *has*, *hamma*, *hana*, and *ha*, can hardly be analogical, and presupposes a masculine **k^uesio*.²¹ While the coexistence of two different stems **k^uo-* and **k^ui-* in the nom. masc. would be difficult, a mere ablaut variant **k^ue-* in the genitive is not. On the other hand, **k^uosio* (Skt. *kāśya*, Slav. *kogo* etc.) is a natural innovation to **k^uos*.

The Slavo-Armeno-Iranian grouping of **k^uesio* with the neuter need not be old. Once given the opposition **k^uos*/**k^uid* in the nominative, the association of **k^uesio* with **k^uid* was largely a matter of course. This is especially true of the palatalizing languages, Slavic and Iranian. Here, after the rise of **kosio* to **kos*, **čes(̂)o* by its palatal was naturally grouped with **čid*. In Armenian, where the interrogative has no initial alternation (we have nom. *ov* : *i*, gen. *oyr* : *ēr*), this co-ordination was not so compulsory; but the new **kosyo* (*oyr*), closely associated with **kos* (*ov*), here also drove **kesyo* (*ēr*) towards **kid* (*i*).

**K^ues(̂)o*, therefore, was probably originally both masculine and neuter, as in Greek and Gothic, and its restriction to the neuter in Slavic, Armenian, and Iranian is secondary. That the genitive, in opposition to the nominative, had not two different forms for the two genders, is understandable, if we consider that the genitive neuter by nature occurs only seldom; as examples for its use may serve Gk. Hom. *τέο σε χρή* 'what do you need?' Od. 4.463, OCS *česo radi* John 12.5 = MPers. *čē rāδ* 'why', and Pāli *kissa hetu* 'why'.

(A secondary differentiation of gender in the genitive has taken place in Middle Indic. Pāli in the neuter has *ki*-forms beside *ka*-forms: *kissa* and *kissa hetu* 'why' (but *kissa* occurs also as masculine), abl. *kismā*, and loc. *kismim*;²² correspondingly Pkt. *kīsa* 'why', abl. *kiṇo*, and instr. *kiṇā*;²³ the *i* of these forms stems probably from *kim*.)

9. It has been shown in §5 that Iranian is divided for the word 'what': while Old Persian and all of Middle Iranian have **čit* (MWest Iran. **čahya* also presupposes **čit*), Avestan has almost exclusively *kač*. If the Indo-European form was **k^uid*, Av. *kač* stands between previous and subsequent **čit*. It seems that one part of Iranian, appearing earliest and lost thereafter, replaced **čit* by **kat* (**kat* to **kah* after the model of **yat* to **yah*; Gothic type of leveling), while another, preponderant part, on which all of Middle Iranian is based, continued the original **čit* unaltered. Avestan, therefore, represents a sidetrack of development within Iranian.

Studi baltici 3.128 (1933): **k^uo-* originally accented and interrogative, **k^ui-* enclitic and indefinite (this was Caland's theory, cf. Wackernagel 3.560 below), see here fn. 24; and (a strange idea) Vaillant's, BSL 37.103-4 (1936): **k^ui-* from an oblique case.

²¹ Cf. Wackernagel 3.561 (who does not separate the genders).—Hittite, as against *kwi-* in the nom. and acc. (*kwis*, *kwin*, neut. *kwił*), has *kwe-* in the gen., dat., and abl. sg. (*kwel*, *kwetani*, *kwez*; Sturtevant §256 and §275), probably for animate as well as inanimate.

²² W. Geiger §111; Andersen, Pāli Reader Gloss. 75b; Dict. PTS sub *ka* and *kin* (read *kiṇ*).

²³ Pischel §428.—In Hindi, *kis* is obl. masc., while the neuter is *kāhe*.

Even if we assume an original coexistence of **kad* and **čid* and attribute the difference between Avestan and Middle Iranian only to a divergent selection, the dialectic difference between Avestan and all of Middle Iranian remains: Mİran. **čit* cannot go back to Av. *kaṭ*.

Av. *čiš*, sporadic as interrogative, but regular as indefinite (§5), would be a contrary innovation to *kaṭ*: when **kat* arose beside original **čit*, there also arose, conversely, *čiš* beside original **kah*. The virtual restriction of this *čiš* to the indefinite would be a matter of secondary differentiation.²⁴

10. Similar is the situation in Indic. Rigvedic has older *kāt* and later *kīm*, the latter the Middle Indic form of Old Indic **kit* (§6); post-Rigvedic Sanskrit has only *kīm*.

Rigvedic *kāt* and *kīm*, from different stems and on different stages of development, cannot have existed in one dialect, not even as a transitional state: *kāt* could only have become **kam*, not *kīm*; and even if we admit coexistence of *kāt* and **kit* in one dialect (which seems to me unlikely), they could not appear in different stages, one in Old and the other in Middle Indic form.

Rather, the coexistence of *kāt* and *kīm* in the Rigveda is a matter of dialect mixture. There were two dialects, a *kāt*-dialect and a *kīm*-dialect; the earlier hymns are based on the former, the later ones on the latter. *Kīm* represents older **kit*; Old Indic had *kāt*-dialects and **kit*-dialects; the former made up the oldest literary language; the **kit*-dialects, on the other hand, entered literature only later, AND AT THAT TIME **kit* HAD ALREADY THE MIDDLE INDIC FORM, *kīm*.

If the Indo-European form was **k^uid*, then one Old Indic dialect, appearing in Old Rigvedic, replaced **cid* (or later **kid*) by **kad* (Gothic type of development), but others, which emerge in later Rigvedic and stay thereafter, directly continued the original *i*-form. Old Rigvedic *kāt* stands between IE **k^uid* and Later Rigvedic and Post-Rigvedic **kit* just as Av. *kaṭ* stands between IE **k^uid* and Mİran. **čit*. In Indic as in Iranian, the type earliest attested represents a side development, while the later stages have more archaic forms. This is certainly somewhat strange; but even apart from the Slavic and Armenian correspondences, a purely Indo-Iranian fact points to **k^uid* as the older form: the particle Skt. *cit*, Av. *čit*. The isolated word, aloof from the influence of **kas*, preserves the original form.

Avestan and Old Rigvedic **kad* may perhaps have arisen in historical connection, in a grouping of neighboring dialects of Pre-Iranian and Pre-Indic, while the greater part of both languages preserved **cid*. Perhaps the essentially indefinite Avestan and Rigvedic **ciš* (Av. *mā čiš* = RV *mā-kiḥ* etc.) also was an innovation of this group only.

Even if we start not from IE **k^uid*, but from coexistent **k^uid* and **k^uod* (which is not my opinion), the later Indic **cit* is at least independent from the earlier documented **kat*: Later Rigvedic *kīm* cannot go back to Old Rigvedic *kāt*.

11. As stated above in §6, the dialect which had *kīm* for **kit* must also have had **yam* and **tam* for *yāt* and *tāt*; it is not possible that the *a*-noun (*phālam*)

²⁴ This Avestan (and Rigvedic) restriction of *čiš* to the indefinite, not mentioned by Benveniste, Studi baltici 3.128, would fit his idea that **k^uo-* was originally interrogative and **k^ui-* indefinite. But otherwise this theory seems not to be supported by the facts.

transformed the *i*-form **kit* before the *a*-forms *yāt* and *tāt*; the nominal neuters in *-i-* have no *-m* in the nominative in Old Indic (*hārdi*, adj. *śūci*), and still fluctuate between *-im* and *-i* in Pāli and Prākṛit.²⁵

Why, then, has Rigvedic *kīm*, but not **yam* and **tam*? The reason seems to be this: Old Rigvedic had *kāt*, *yāt*, and *tāt*; the *kīm*-dialect had *kīm*, **yam*, and **tam*. **Yam* and **tam* were felt as low forms of *yāt* and *tāt*, and were excluded; *kīm*, on the other hand, which had no literary **kit* against it, was admitted.

The rejection of **yam* and **tam* becomes still more understandable by the following consideration. At the time when the *kīm*-dialect entered literature, the replacement of the pronominal neuters in *-i* by *m*-forms had probably begun also in the *kāt*-dialect; here also against literary *kāt*, *yāt*, and *tāt*, there arose **kam*, **yam*, and **tam*. The Rigvedic school was, therefore, wont to be on guard against **yam* and **tam*; but not against *kīm*, which was foreign to their dialect. Therefore this was not opposed. On the other hand, the *kīm*-poets found Old Rigvedic *kāt* probably so strange that they had difficulty in accepting it.

We are, therefore, facing the existence in the Rigveda, even in older parts and in 80 occurrences, of a purely Middle Indic form. Before we accept this unexpected fact, one possibility has to be examined: can *kīm* be redactional, in the manner of the imperative *bodhī* 'be', substituted for original **būdhi* under the influence of Middle Indic *hohi* (so Pāli) (Wackernagel xi)?

Had the original Rigveda only *kāt*, and was *kīm* only brought in by later reciters (or still later scribes)? I do not think this possible, because *kāt* still exists beside *kīm*, and a partial replacement is neither known (there is no **būdhi* beside *bodhī*) nor likely. We might envisage another explanation: perhaps the original Rigveda had *kāt* and **kit* in the present distribution of *kāt* and *kīm*; *kāt*, which did not continue after the Rigveda, remained unaltered, but **kit* was replaced by its Middle Indic form, *kīm*. This seems at first not implausible; but—if an original Rigvedic **kit* was replaced by its Middle Indic form *kīm*, why were not *yāt* and *tāt* replaced by Middle Indic **yam* and **tam*?

12. It seems, therefore, provisionally most probable that *kīm* belonged to the original text. It is a morphologic Prākṛitism in the Rigveda.

Wackernagel, in 1896, thought the Rigveda had "keine ganz sichern Spuren mittelindischer Formenbildung" (xviii bottom) and recognized only one such case: the 10th book imp. *kuru* and ind. 1st pl. *kurmdh* for normal *kṛṇu* and (AV) *kṛṇmāsi*.²⁶ The same standpoint seems essentially to be held in the third volume, in 1930. But I think this doctrine does not do full justice to the connection of morphologic development in the Rigveda (and Sanskrit generally) with Middle Indic.

For instance, the *u*-stem *cākṣu-* 'eye' instead of *cākṣuṣ-*, which appears in the abl. *cākṣoḥ* 10.90.13, in the late Puruṣa-hymn²⁷ (*cākṣoḥ śūryo ajāyata* 'from his eye sprang the sun'), coincides with the Pāli *u*-stem *cakkhu-* (nom. *cakkhu* and *cakkhum*, instr. *-unā* etc.).

²⁵ W. Geiger §85, Pischel §377.—True, *-i* may possibly not only be the old form, but to some extent represent a secondary transfer to the masculines.

²⁶ A Rigvedic Prākṛitism in verb inflection was pointed out by me LANG. 20.215: the active inflection of the aorist subjunctives *marāti*, *marāma*, *maranti* RV 1.191.

²⁷ A 'popular' hymn according to the theory of Arnold, Vedic Metre 22.

Wackernagel-Debrunner²⁸ 290-1 attribute this form to the transition of the *uṣ*-stems into *u*-stems in the masc.-fem. compounds, based on the coincidence in the nom. sg. (e.g. RV *viśvāś-cakṣuḥ* 'having eyes on all sides'). This explanation no doubt is true for the AV voc. *sahasra-cakṣo*, and if the Rīgveda has e.g. *vrddhāyū* 'full of vigor' beside *dirghāyūṣam* 'long-lived',²⁹ an extension of this fluctuation to the simplexes was not impossible (although in *cakṣuṣ-* the simplex was much more frequent than the compounds).

But this possibility of transition was open since Indo-Iranian. The stem *cakṣu-*, on the other hand, appears only once in a definitely late hymn. This seems to indicate that here a new cause is working: that RV *cakṣoḥ* is a reflex of the Middle Indic stem *cakkhu-*. This Middle Indic stem has of course nothing to do with the transfer of *uṣ*-stems in masc.-fem. compounds. It is due to a Middle Indic phonetic change: *cakṣuḥ* became **cakṣu*³⁰ by loss of final *h*, and this was inflected as an *u*-stem; just as *vidyūt-* f. 'lightning' (which in Old Indic never had contact with the *u*-stems) became an *u*-stem (Pāli *viḍḍu-*) after the nominative had lost its final *t* (W. Geiger §75).

If, therefore, the RV stem *cakṣu-* is identical with Pāli *cakkhu-*, then it would be strictly Middle Indic, for it would be based on a purely Middle Indic phonetic change.

The ending of *cakṣoḥ*, older than Pāli *-uno* and *-ussa*, would still be that of RV *mādhōḥ* (with *h* restored by Sanskritization). *kṣ* may still have existed at the time of the loss of final *h*; or *cakṣoḥ* may be a Sanskritization of real **cakkho*. After the Rīgveda, *cakṣu-*³¹ appears in Sanskrit only sporadically as first member of compounds, in Śvet. Up. and Āp. Dharm.

13. In *āyu-* 'life' beside *āyuṣ-* the situation is different. The loc. *āyuni* appears in three old Rīgveda hymns; there is a frequent compound *viśvāyū-*; 3.49.2 the meter would require **āyu* instead of *āyur*;³² and Avestan has only *āyu-* (nom. *āyū* [twice] and gen. *ayaoš* [i.e. *āyauš*]) (cf. Wackernagel-Debrunner 3.291). Perhaps, therefore, there was an old stem **āyu-* beside **āyuṣ-*, belonging with Lat. *aev-um* etc. It should be noted, however, that **āyuni* is the older locative of Pāli *āyu-* = Skt. *āyuṣ-*, cf. Pāli *ambuni* 'into the water' (W. Geiger §85); RV *āyuni*, therefore, might be a redactional replacement of *āyuṣi*.

The kind of Prākṛitism here envisaged for *cakṣoḥ* seems clearly given in a later case, to which my attention is drawn by Professor Edgerton. In Kauṣītaki Upaniṣad, *jāgat-* n. 'world' has the pl. *jagāni* (Fürst, KZ 47.18). According to Wackernagel-Debrunner 3.263, *jagāni* was formed to *jāgat* after the analogy of *tāni* to *tāt*. This seems to me erroneous; for me there is no doubt that *jagāni* is the Middle Indic form as appearing in Pkt. Māh. *jaam*, AMāg. *jage*, Ap. *jagu*, acc. AMāg. *jagam*, gen. Ap. *jaassu*, loc. Māh. *jae*, *jaammi* etc. (Pischel

²⁸ The substantive, except for the *i*-stems, *ū*-stems, and *panth-*, is drawn up by Debrunner (cf. p. iii).

²⁹ Macdonell §342.

³⁰ Or, possibly, only **cakkhuḥ* became *cakkhu*.

³¹ Except for the AV voc. fem. *sahasra-cakṣo*, which, as shown above, is of different kind.

³² Grassmann; Macdonell 294 bottom.—For the Atharvaveda, Macdonell l.c. quotes several cases where the meter requires **-u* instead of the textual *-uḥ*; these are probably Prākṛitisms.

§395; for Pāli, the Dict. PTS quotes only the old type *jagat*-). *Jāgat* by final loss of *t* became **jaga*; this, as a neuter, was transformed into **jagam* as *cakkhu* into *cakkhum*; and **jagam* then was inflected as an *a*-stem.

14. Another morphologic agreement between Rigvedic and Middle Indic, which again is pointed out to me by Professor Edgerton, is the instrumental *nāḍyā* 'with the ship' RV 1.97.8, in a popular hymn:³³ *sā naḥ stndhum (i)va nāḍyāti parśā svastāye* (Gāyatrī) 'bring du uns hinüber zum Heil wie mit dem Schiff über den Strom' (Geldner). Of course *nāḍyā* is formed to the instr. *nāvā* after the analogy of *jihvāyā* beside *jihvā*. But Wackernagel-Debrunner's explanation 3.224: "dichterische Freiheit ..., die sich etwa an das Nebeneinander von *-ā* und *-ayā* im ISg. der *ā*-Stämme anschloß" mistakes this form. This is not an inconsequential nonce-formation, but the first step toward the Middle Indic stem *nāvā*- (Pāli *nāvā*-, Pkt. *nāvā*-).

The same development appears in the instrumentals pl. *kṣapābhiḥ* RV 4.53.7 and *kṣīpābhiḥ* 9.97.57 from *kṣap-* f. 'night' and *kṣīp-* 'finger', which, on the base of the instrumentals sg. *kṣapā* and **kṣīpā*, replaced the inconvenient **kṣabbhiḥ* and **kṣībbhiḥ* (Wack.-Debr. 3.241); *kṣapā*- appears in Epic and Class. Sanskrit; Middle Indic seems in general not to continue either word.³⁴

In Old Indic, the instr. sg. was the only point of coincidence for consonant and *ā*-stems; Middle Indic adds one more: after the shortening of covered longs, the acc. (Pāli) *nāvaṃ* coincided with *kaññaṃ*.

But between *cākṣoḥ* (if it is Middle Indic) and *jagāni* on the one hand and *nāḍyā* on the other there is a difference: the former two are conditioned by a Middle Indic phonetic change, but *nāḍyā* is not. *Nāḍyā* is of course a step on the way to Pāli *nāvā*-, but it could arise beside *nāvā* at any time within Old Indic. True, it appears only in a late hymn, but *kṣapābhiḥ* and *kṣīpābhiḥ* in fact are found in old ones. *Nāḍyā*, therefore, cannot directly be called a Prākṛitism. It seems that in morphologic development, if a process is not based on a Middle Indic phonetic change, there is no strict criterion for the boundary between Old Indic and Middle Indic.

The exact ending of RV *nāḍyā* is again (cf. *cākṣoḥ* above) still pre-Pāli; Pāli has *nāvāya*. And again *nāḍyā* does not occur in Sanskrit after the Rigveda; here as in other cases (*marāti* and, if Middle Indic, *cākṣu-*) the Rigveda is more open to Middle Indic tendencies than the later language; first, because the language was not yet so strictly standardized, and second, because the difference between Sanskrit and Middle Indic still was smaller.

Similar in character to *nāḍyā* is the isolated RV *imāsya* 8.13.21, in an old hymn, for regular *asyā*: *yādi me sakhyām āvāra imāsya pāhy āndhasaḥ* 'if you choose my friendship, drink from this juice'. No doubt this *imāsya*, as noted by Wackernagel 3.515, is a forerunner of Pāli *imassa* beside *assa*, Asokan *imasa*,

³³ Arnold 272, but not on p. 22.—Note isolated late *parśā* for normal *pārṣi*.

³⁴ But Sheth, *Pāiasaddamahāṇavo*, gives *khavā*- f. 'rātri' without reference, and *khavā-jala-* n. 'avaśyāya; rime' from *Thāṇaṅgasutta* (AMāg.).—Bartholomae, Wb. 549, sets the Av. nom. sg. *xšapa* up as an *ā*-stem *xšapā*-. But I do not understand why this form may not be the nom. of the frequent *an*-stem *xšapan-* f. (cf. Wb. sub *xšapā*- note 1).

and Pkt. JMāh. etc. *imassa*. Yet the gen. *imdsya* could be formed to the acc. *imdm* at any time in Old Indic.³⁵

15. Between all these forms and *kīm* there is a sharp difference: they are isolated variants; *kīm*, on the other hand, occurs 80 times and is the only form from the stem *ki-* for this case; there is no **kit*. In addition, I think (as shown in §11) that *kīm* for its dialect also presupposes **tam* and **yam*.

The transformation of **kit* into *kīm* is a purely morphological process. It does not presuppose a Middle Indic phonetic change. If, therefore, some one should prefer to call the dialect with *kīm*, **tam*, **yam* still Old Indic, he can hardly be refuted. But I think a language which in so important a point had already performed the transition to Middle Indic, is better regarded as 'archaic Middle Indic'.^{35a} After all, this is only a matter of terminology. Essential is (1) that, contrary to RV *tāt* etc., RV *kīm* is already identical with the Middle Indic form; (2) that, contrary to e.g. *imdsya*, *kīm* is not an isolated tentative form, but the only form from the stem *ki-* for this case, with 80 occurrences; and (3) that, while in the Old Indic morphologic system *kīm* is an erratic rock and unexplainable, in the Middle Indic system it is entirely normal.

16. Pronoun and particle combined, *kīm* appears in the following hymns (an asterisk marking the hymns which Arnold, Vedic Metre 22, designates as 'popular', either for their whole extent or for the verses containing *kīm*): 1.23*, 118, 122, 161, 164*, 165, 170, 182, 191*; 2.16, 29; 3.53(*),³⁶ 58; 4.5, 18*, 21, 23, 30; 5.2, 30, 32, 83; 6.9, 20, 22, 27, 44, 47(*), 52; 7.55(*), 83, 86, 89, 100, 104*; 8.8, 21, 48, 73, 80; 9.69, 114*; 10.7, 9*, 10*, 12, 31, 38, 42, 48, 59*, 79, 81*, 86*, 90*, 95, 97*, 108, 112, 129*, 130*.

Only a quarter, therefore, of the hymns with *kīm*, 15 out of 61, belong to the 'popular' group, the latest stratum of the Rigveda. The majority is of older origin.

Significant in this respect is the different expression of the future in the *kīm*-sentences. On the one hand, we have *sya*-future (latest stage): 1.164.39 ('Rāt-sellied', popular) *yās tān nā vēda kīm ṛcā kariṣyati* 'he who does not know it (the syllable), what will he do with the Ṛc?', or 6.9.6 *kīm svid vaksyāmi kīm u nū maniṣye* 'what shall I speak, what shall I now imagine?'. But more frequent is the subjunctive, either present: 8.48.3 *kīm nūnām asmān kṛṇavad ārātiḥ* 'what will ill-will now do to us?', 5.2.3 *kīm mām anindrāḥ kṛṇavann anukthāḥ* 'what will the Indra-less and song-less do to me?' (just so 2.29.3, 4.18.4, 10.7.6),—or (oldest stage) aorist: 5.30.9 *kīm mā karant abalā asya sēnāḥ* 'what will his weak

³⁵ To RV *imdsya* Wackernagel l.c. adds Ait.Ār. *imdsmai*, MBh. *imaiḥ* etc., and says: "Diese formen sind wohl MEISTENS mittellindischen Ursprungs" (capitals mine). Apparently at least the RV form is not yet regarded by him as Middle Indic; and I should agree with this.

^{35a} I do not of course mean the language of the Rigveda hymns with *kīm*, but the SPOKEN language of the *kīm*-poets, which no doubt had also other Middle Indic features.

³⁶ (*) denotes hymns parts of which Arnold designates as popular, but not the verses containing *kīm*; the *kīm*-passages are: 3.53.14; 6.47.10; 7.55.3. (On p. 280, however, Arnold notes the last verse as popular.)

hosts do to me?' (just so 10.48.7); Middle Indic *kīm* and primeval aorist subjunctive future in strange combination.

Kāt, on the other hand, pronoun or particle, occurs in the following hymns [* and (*) again being used with the above meanings]: 1.38, 43, 74, 105, 121, 161, 185; 2.27; 3.58; 4.3, 5, 12, 23; 5.41, 48, 82; 6.15, 46, 47(*), 71; 8.3, 4, 7, 21, 33, 66, 67, 84, 93, 94; 10.10*, 12, 29, 93, 99.

Here of 35 hymns only one is 'popular'.

17. Several hymns have both *kāt* and *kīm*, three even in one and the same verse. They are probably the work of *kīm*-poets, who, however, also used the traditional *kāt*.

The passages and (presumable) meanings are as follows:

		<i>kāt</i>	<i>kīm</i>
1.161	161	1 'what' subst. ³⁷	1 'why', ³⁷ 'WHAT' ADJ., 10 'what' subst.
3.58	292	4 <i>kác cit</i> 'jedenfalls' ³⁷	3 interrog. particle ³⁷
4.5	301	12, 13, both 'what' adj.	8, 12, 14, all 'what' subst. (or 12 adj.?)
4.23	319	2 'what' adj., and interrog. part., ³⁷ 5 'what' adj.	6 interrog. part. ³⁷
6.47	488	3 <i>kác cand</i> 'any'	10 <i>yāt kīm ca</i> 'whatever'
8.21	641	1 <i>kác cit</i> 'some-(any-)thing'	6 'why'
10.10*	836	4, 6 'WHY' ³⁸	11 'what' subst. ³⁸
10.12	838	5 'what' subst.	5 'why'

It would have been possible for the poets to differentiate the two forms in meaning. However, as far as the exact meanings are definable at all, a contrast seems to exist only in some of the hymns (4.5, 10.10, and 10.12), and here in different directions: 10.10 has *kāt* 'why' and *kīm* 'what' subst., but 10.12, *kāt* 'what' subst. and *kīm* 'why'. On the whole, 'why' is more frequently *kīm*, and 'what' adj., *kāt*; but both forms have all four meanings: 'what' subst., 'what' adj., 'why', and interrogative particle.

I give the three verses which combine *kāt* and *kīm*:

1.161.1 *kīm u śrēṣṭhaḥ kīm yāviṣṭho na ājagan kīm ūyate dūtyam kād yād ūcimā* 'warum ist der Schönste, warum der Jüngste zu uns gekommen? welche Botschaft bringt er? was war es, das wir gesagt haben?' (Geldner).

4.5.12 *kīm no asyā drāviṇam kād dha rātnam* ('*asyā drāviṇam* für *drāviṇasya*, indem *drāviṇam* von *kīm* attrahiert wird' Geldner) 'what is ours of this wealth, what jewel?' (not 'was ist das Kleinod?' Geldner); *kīm* may have been felt as a substantive, but in strict grammar it is an adjective: 'what wealth of this is ours?'.

10.12.5 *kīm svin no rājā jagrhe kād asyāti vratam cakmā kó ví veda* 'why has the king seized us? what have we done against his law? who knows it?'.

The numbers of the occurrences of *kāt* and *kīm* (pronoun and particle combined) in the single books are these:

³⁷ Geldner, Translation.

³⁸ Whitney-Lanman, Atharva-Veda Translation, for AV 18.1.4, 7, and 12.

	Book 1	2	3	4	5	6	7	8	9	10	Sum
<i>kāt</i>	8	1	1	8	3	5	—	13	—	7	46
<i>kīm</i>	14	2	2	9	4	7	7	7	2	26	80

Kīm, therefore, is more frequent in all books but the 8th, and especially in the 10th (nearly 4 : 1).

In *kīm* we have, therefore, a quite singular attestation of the archaic Middle Indic, which was the spoken language of the later Rigveda poets. That this language comes to the surface just in this element, is ultimately due to the fact that Old Indic for this form was divided dialectally: it had both *kāt* and **kit*. In consequence, the age difference (*-m* : *-t*) was here strengthened by the original dialect difference (*i* : *a*), and this DOUBLE difference (*kīm* : *kāt*) was strong enough to break through the coercive forces of standardization.

THE ETYMOLOGY OF HISPANIC *que(i)xar*

YAKOV MALKIEL

UNIVERSITY OF CALIFORNIA

[On the basis of a complete record of the word and of its derivatives in ancient and modern dialects, an attempt is made to link OSp. (*a*)*quezar* 'to press, to squeeze, to crush' with OPtg. *queizo*, OSp. *quez-ada*, Cat. *queiz* 'jaw' < *capsu*; the further semantic development shows no anomalies. In the course of the discussion of the suggested etymology, reference is made to questions of method in Romance word-studies; to contrasts between the Old Spanish and the Old Portuguese vocabularies and their subsequent interpenetration; to synonyms of (*a*)*quezar* and of *quezarse* and their relation to the neologism; to various suffixes involved (*-ura*, *-ümen*, *-ösus*, *-iläre*, *-icäre*); to individual words, including Mozar. *quezdär* < *quaesi-tare*, Sp. *quejigo*, Sp. *requejo*, Sp. *caja*, and its cognates.³

I. EARLIER THEORIES

1. The origin of Sp. *quejarse* (OSp. *quezarse*), Ptg. *queixar-se* 'to complain' and of their congeners has been one of the most widely discussed problems of Hispanic etymology.¹ Among the pioneers of Spanish word-studies Covarrubias was inclined to relate the stem to Lat. *queri* 'to complain';² Francisco del Rosal connected it with *querē(l)a* 'complaint';³ J. Minsheu thought of an Arabic origin,⁴ doubtless because of the presence of *-x-* in numerous Arabisms (a fact known to Nebrija⁵ and to J. de Valdés⁶); while his successor Pineda was satisfied with a compromise, linking *queza* 'complaint' with an Arabic root, yet deriving *quezar* from *queri*.⁷ The theory of Basque origin was suggested first by Larramendi,⁸ taken up by Terreros,⁹ and reiterated by Cejador y Frauca.¹⁰ Aldrete¹¹ and

¹ The sources of this study are listed in the last footnote.

For further bibliographic data see fn. 9 for ancient dictionaries consulted, fn. 341 for dialectal glossaries used.

² S. de Covarrubias Orozco, *Tesoro de la lengua castellana*² (Madrid, 1674). According to J. M. Hill, *Index verborum de Covarrubias* (Indiana Univ. Studies 8; Bloomington, 1921), the only derivatives mentioned by the ancient lexicographer are *queza*, *quezarse*, *quezoso*, and *aquezar*. Covarrubias' etymology was accepted by Roque Barcia.

³ In the unpublished *Origen e etimología de todos los vocablos originales de la lengua castellana*. The writer owes knowledge of this theory to Monlau.

⁴ R. Percival and J. Minsheu, *A Dictionary in Spanish and English*² (London, 1623).

⁵ [A. de] Nebrija, *Gramática de la lengua castellana* [Salamanca, 1492], ed. I. González Llubera, p. 243 (Oxford University Press, 1926).

⁶ Juan de Valdés, *Diálogo de la lengua*, ed. J. F. Montesinos, pp. 39, 86 (Clásicos castellanos 86; Madrid, 1928).

⁷ P. Pineda, *Nuevo diccionario español e inglés e inglés y español* (London, 1740).

⁸ M. de Larramendi, *Diccionario trilingüe del castellano, bascuence y latín* 1.91, 2.213 (San Sebastián, 1745).

⁹ E. de Terreros y Pando, *Diccionario castellano con las voces de ciencias y artes* (Madrid, 1786-93). Here is a list of other ancient dictionaries referred to throughout the essay: A. de Nebrija, *Diccionario de romance en latín* (1492; an 18th-century reprint was available); C. de las Casas, *Vocabulario de las dos lenguas toscana y castellana* (Seville, 1570); A. Sánchez de la Ballesta, *Diccionario de vocablos castellanos aplicados a la propiedad latina* (Salamanca, 1587); H. Vittori, *Tesoro de las tres lenguas francesa, italiana y española* (Gen-

Maiáns i Siscar apparently failed to state their opinion on the subject.¹² In the 19th century Cabrera went a step farther by associating *quejar* with the participial form *questus*.¹³ The 12th edition of the Academy Dictionary (1884) suggested *aculeäre* > **aqueiäre* 'to spur' as a fitting etymon for *aquejar* (and was to find a belated supporter in Lanchetas¹⁴), but derived *queja* from *querēla* and *quejar* from *queja*. Diez, who believed that Latin medial *-st-* yielded *-x-* in Old Spanish,¹⁵ adopted Cabrera's suggestion¹⁶ and maintained it in subsequent writings.¹⁷ In his wording **questäre* was a frequentative variant of *queri*. Diez's theory was in turn accepted by Reinhardstoettner,¹⁸ Coelho,¹⁹ and Fernández Llera.²⁰

2. The correctness of this view was questioned by Baist and Cornu almost simultaneously around the year 1880. Baist attacked Diez's assumption that OSp. *-x-* could be a product of Lat. *-st-* as the weakest point of his argument,²¹ tentatively substituting *quassäre* 'to shake, to shatter', and finally selecting

eva, 1606); C. Oudin, *Tesoró de las dos lenguas francesa y española* (Paris, 1607); idem, 2nd ed. (Paris, 1616); L. Franciosini, *Vocabolario italiano e spagnolo* (1636); *Le grand dictionnaire et trésor de trois langues: françois, flameng et espagnol* (Antwerp, 1640); A. de La Porte, *Den Nieuwen Dictionarius in Duytsche en Spaensche Talen* (Antwerp, 1659); J. Howell, *Lexicon Tetraglotton, an English-French-Italian-Spanish Dictionary* (London, 1660); F. Sobrino, *Diccionario nuevo de las lenguas española y francesa*² (Brussels, 1721); idem, 4th ed. (Brussels, 1744); *Diccionario de Autoridades*; *Diccionario de la R. Academia Española*² (Madrid, 1770); F. Cormon, *Sobrino aumentado o nuevo diccionario de las lenguas española, francesa y latina* (Antwerp, 1776); Fr. Francisco Cañes, *Diccionario español-latino-árabe* (Madrid, 1787); M. de Valbuena, *Diccionario universal latino-español* (Madrid, 1793); J. D. Wagener, *Diccionario de faltriquera o sea portátil español-alemán y alemán-español* (Berlin, 1808-9); M. de Valbuena, *Diccionario universal español-latino* (Madrid, 1822); Núñez de Taboada, *Dictionnaire espagnol-français et français-espagnol*¹¹ (Paris, 1842); Roque Barcia, *Primer diccionario general etimológico de la lengua española* (Barcelona, 1879-94); J. Caballero, *Diccionario general de la lengua castellana*⁴ (Madrid, 1882). Of the editions of the Academy Dictionary, the latest (17th) is not accessible.

¹⁰ J. Cejador y Frauca, *La lengua de Cervantes* 2.916-7 (Madrid, 1905-6).

¹¹ B. Aldrete, *Del origen y principio de la lengua castellana*² (Madrid, 1674).

¹² G. Mayáns i Siscar, *Orígenes de la lengua española* 2.124-58 (Madrid, 1737).

¹³ R. Cabrera, *Diccionario de etimología de la lengua española* 2.558 (Madrid, 1837). There is a reference to the old graph *quesarse* as found in Gonzalo de Berceo; it was not yet known at that time that in pre-Alphonsine orthography *s* and *ss* could stand for [š], especially in the transcription of older paleographers; see Berceo, Milagros, ed. A. G. Solalinde xxxi.

¹⁴ R. Lanchetas, *Gramática y vocabulario de Gonzalo de Berceo* (Madrid, 1900). A. de Pagés also adhered to this theory, see *Gran diccionario s.v.*

¹⁵ F. Diez, *Grammatik der romanischen Sprachen* 1.260 (Bonn, 1836-44).

¹⁶ See *Etymol. Wtb. d. roman. Spr.* 524 (Bonn, 1853).

¹⁷ Diez-Scheler, *EWRS*⁶ 479 (Bonn, 1887).

¹⁸ C. von Reinhardstoettner, *Grammatik der portugiesischen Sprache* 91 (Strasbourg, 1878).

¹⁹ F. A. Coelho, *Dicionário manual etimológico da língua portuguesa*. I owe knowledge of Coelho's opinion to Nascentes.

²⁰ V. Fernández Llera, *Gramática y vocabulario del Fuero Juzgo* (Madrid, 1929 [composed 1900]). An earlier glossary by the same author to the works of Gonzalo de Berceo has remained unpublished.

²¹ See *ZRPh.* 5.248.

**questiāre* as the presumable etymon.²² This theory was widely acclaimed in the following years; it found supporters in Körting (throughout the three editions of his dictionary),²³ Cortesão,²⁴ Gorra,²⁵ Gassner,²⁶ and Ford,²⁷ and was quite recently revived by Jud,²⁸ Luria,²⁹ and Castro.³⁰ Among the advocates of this theory there is no complete agreement on the spelling (and, implicitly, origin) of the hypothetical base. Some indicate it as **questiāre*, others as **quaestiāre*, and Singleton actually derives the Spanish word from a blend of the two hypothetical words (the former supposedly meaning 'to complain' and the latter 'to aim at', from *quaerere*).³¹ None among the supporters of this theory seems to have taken the trouble to investigate the development of the *quaerere* family in Classical Latin³² or Church Latin.³³ Baist himself upheld his original view in

²² Both because of its somewhat obscure phrasing and of the significance attached to it by subsequent explorers the passage deserves quotation: 'Quezarse könnte quassare sein; der Begriffsübergang wäre dann genau derselbe wie bei *plangere*. *Cansar* wäre dann eine populäre Schreibform, cfr. auch *caxida* S. Millán 230c neben *quessarse*. Am besten wird man aber an der Herleitung von *questus* festhalten; nur muss *questiare* eingeschoben werden, da *st* spanisch nicht zu *x* wird.'

²³ G. Körting, Lateinisch-Romanisches Wörterbuch (Paderborn, 1891); 2nd ed. (Paderborn, 1901); 3rd ed. (Paderborn, 1907) s.vv. *coaxō* and *questiō*.

²⁴ A. A. Cortesão, Subsídio para um dicionário completo (histórico-etimológico) da língua portuguesa (Coimbra, 1900-1). I owe knowledge of Cortesão's opinion to Nascentes.

²⁵ E. Gorra, Lingua e letteratura spagnuola delle origini 62 (Milan, 1898).

²⁶ A. Gassner, Die Sprache des Königs Denis von Portugal §88 (Erlangen, 1906).

²⁷ J. D. M. Ford, The Old Spanish Sibilants, [Harvard] Studies and Notes in Philology and Literature 7.120 (Boston, 1900). Repeated in the etymological vocabulary (s.v.) appended to the same author's Old Spanish Readings (1911 and subsequent reprints).

²⁸ See Homenaje ofrecido a R. Menéndez Pidal 2.25-6 (Madrid, 1925).

²⁹ M. A. Luria, A Study of the Monastir Dialect of Judeo-Spanish Based on Oral Material Collected in Monastir, Yugoslavia, RH 79.437.

³⁰ A. Castro, More on *quejarse*, HR 7.169-70. See also Kuhn, RLir 11.46.

³¹ M. Singleton, Spanish Etymologies: *quejar*, HR 6.206-10. Jud, whom the author quotes as his authority, did not work with two unknowns. Under the influence of Gillieron's theory of conflicting homonyms, he surmised that the danger of confusion between *quero(r)* and *quaerō* (through loss of deponential inflectional endings and simplification of the diphthong) may have led to the coinage of **querio* beside *quaerō*. The assumption of the survival of the *quer-* stem in Spanish and Portuguese would fit into Jud's theory that a number of originally juridical terms have persisted in Ibero-Romance, among them *autumāre*, which he regards (rightly or wrongly) as the base of *tomar*.

³² An excellent summary of the present state of research is found in Ernout-Meillet, Dict. étym. de la langue latine² 830-1 (Paris, 1939); further information is supplied by F. Sommer, Handbuch der lat. Laut- und Formenlehre³ 502, 567, 569, 585-7, 597, 609 (Heidelberg, 1914) and Kritische Erläuterungen zur lat. Laut- und Formenlehre 175 (Heidelberg, 1914). The points of interest for the Romanicist are: confusion in Plautus and Ennius between *quaerō* and the corresponding desiderative *quaesō* (*quaeso*, *quaesumus*, *precor quaesoque*, *oro quaesoque*, and similar formulaic sequences occur, according to Georges, also in Lucretius, Terence, Cicero, Livy, Curtius Rufus, and as late as Claudianus Mamertus); progressive prevalence, especially in the compounds, of the analogical participle *quaesītus* (patterned after *quaesīuī* or in imitation of *cupere* ~ *cupītus*) over the ancient participle *quaestus*, which survived as a verbal noun. There exist old doublets with semantic differentiation like *quaestor* versus *quaesitor*, but in Imperial Latin only the *quaesit-* stem was productive, as shown by the coinage of *quaesitiō*. Surely, there is no way of arriving at **quaes-*

subsequent publications.³⁴ Two leading scholars, however, after endorsing Baist's explanation for a while, later withdrew their approval. Meyer-Lübke, who had sided with Baist in his *Lautlehre* (1890)³⁵ and *Formenlehre* (1894),³⁶ abandoned the theory in a significant review of Ford's thesis (1901).³⁷ Menéndez Pidal, who had lent his support to Baist in the grammatical commentary in the *Cantar de Mio Cid* (1908),³⁸ reversed his position three years later in his glossary to that epic.³⁹

3. Both scholars declared themselves in sympathy with the hypothesis of Cornu, who years before had asserted that *coaxāre* 'to croak' was at the bottom of the Hispanic formation.⁴⁰ Meyer-Lübke continued to adhere to Cornu's interpretation in REW¹ (ca. 1914) and REW³ (ca. 1934). Menéndez Pidal chose not to commit himself on the question in subsequent studies, thus implying a certain measure of skepticism.⁴¹ Cornu's theory (or rather his first theory, although it is hardly ever referred to under this name) was accepted, sometimes with slight modifications, by numerous Romanicists, including C. Michaëlis (in 1894, when she posited the intermediary form **caxāre*,⁴² and again in 1920⁴³),

tiāre from *quaestiōne* and its derivatives. All this tends to show that the Latin evidence does not support the **quaestiāre* base.

³⁴ The data assembled by Du Cange 6.588-91 and by Baxter-Johnson, *Medieval Latin Word-List* (Oxford University Press, 1934), show a very lively development of the *quaerere* family in Church-Latin. Of immediate concern to us is the coinage of *quaeria* 'inquiry, quest, search, taxation' with the variant forms *quaestia*, found precisely on Aragonese and Catalan soil, and *quista*, documented from Spanish and French texts of the 12th and 13th centuries. Even more significant at first sight appears *questialis* beside *questalis*, *questabilis* 'liable to pay the tax, serf'; there exists also a verb *quaestare* (variant *quaesturare*) 'tributum exigere', and *quaestores*, *quaestarii*, *quaestuarii*, *quaestionarii* 'alms-collectors, especially in churches'. Precisely the wide range of competing varieties makes us suspicious that these Middle Latin words may represent merely attempts to Latinize words coined in the vernacular, specifically in Gallo-Romance. Comparison with the material offered by Godefroy, *Dict. de l'anc. fr.* 6.505-7, and by Levy, *Provenz. Supplementwrb.* 6.618-20, immediately confirms this suspicion: *questa*, *questia* are reflexes in Middle Latin of OFr. *queste*, OPrv. *questa*, *quista* (showing the well-known spread to the participial stem of the vowel characteristic of the preterit); Levy quotes even *quistal* beside *questal*. *Quaestia* or *questia* is, then, a spurious Latin word (comparable to *quaessia* 'capsa' Du Cange 6.558c, extracted from OFr. *casse*) and does not help us in tracing the genealogy of *que(i)zar*.

³⁵ See Gröber's *Grundriss*¹ 1.705 (ca. 1888) and Gr.² 1.901 (ca. 1904).

³⁶ See W. Meyer-Lübke, *Romanische Grammatik* 1.429, where the etymon is implicit in the mention of the cluster [stj]:

³⁷ *Ibid.* 2.606; the etymology is stated explicitly, without an asterisk (notice the same carelessness in the above-quoted text of Baist).

³⁸ LGRPh 22.298 (the page reference in REW¹ and REW³ is incorrect).

³⁹ *Cantar de Mio Cid* 187.

⁴⁰ *Ibid.* 815.

⁴¹ *Romania* 9.136.

⁴² There is no mention of *quejar* in the 1st, 4th, and 6th editions of *Manual de gram. hist. esp.* (of the years 1904, 1918, and 1941 respectively), nor in the chapters of Orígenes del español dealing with the development of the sequences [stj] and [aks].

⁴³ In a review of Körting's LRW¹ in Vollmöller's *Krit. Jb.* 4.341: 'Das richtige Grundwort für *queizar* ist nicht *quaestiare*; das hätte im Altport. *queschar* ergeben, wie *bestia* > *bescha*,

Gröber (who preferred the base *quaxāre*;⁴⁴ present day Latinists regard *coaxāre* and *quaxāre* as alternate spellings of the same word⁴⁵), Huber (in 1908, in a review of Gassner's study,⁴⁶ and again in 1933⁴⁷), Barreto,⁴⁸ Nascentes,⁴⁹ Alemany Bolufer,⁵⁰ Richardson,⁵¹ García de Diego,⁵² Aguado,⁵³ Krüger,⁵⁴ Tuttle,⁵⁵ and conceivably yet other scholars; it is also given some consideration by the redactors of the later editions of the Academy Dictionary.⁵⁶ Oddly enough, the one Hispanist not satisfied with this theory was Cornu himself. A few years later (1888) he suggested the new etymon **capsāre* < **carpsāre*, a variant form of *carpere* 'to tear (one's hair in token of grief)', allegedly comparable to *rapsāre* beside *rapere*.⁵⁷ This view Cornu reiterated around the year 1904.⁵⁸ The second explanation of Cornu passed almost unnoticed.⁵⁹ Only Coelho incorporated it into the supplement to his dictionary.⁶⁰

4. For many years no renewed attempts were made to elucidate the origin

christianus > *chrischão* u.a.m. Zur Zeit als man *bestscha*, *chrischão* sprach, schrieb man bereits *queizar*, das nur *cazare* für *coaxare* sein kann.'

⁴³ Glossário do Cancioneiro da Ajuda, Rev. Lus. 23.1-95. True, this glossary had been compiled many years before its publication.

⁴⁴ Archiv für lateinische Lexikographie 5.128.

⁴⁵ Ernout-Meillet, Dict. étym.² s.vv. On expressions for 'croaking' in Romance see H. Schuchardt, Die lateinischen Wörter im Berberischen 28-31 (Sitzungsber. Wien 188, No. 4). Spanish applies *graznar* to frogs and ravens alike, French distinguishes between *coasser* and *croasser*, as does German between *quaken* and *krächzen* and Russian between *kvakat'* and *karkat'*, the [r] being used to characterize the cry of the bird. Unsolved is the etymological problem raised by A. Thomas, *Crassantus* ou *crazantus*, nom du crapaud chez Eucheria et ailleurs, ALMA 3.49-58. On *gaznar*, -ido see BRAE 10.31.

⁴⁶ See LGRPh. 29.409.

⁴⁷ J. Huber, Altpgt. Elementarbuch 61, 108 (Heidelberg, 1933).

⁴⁸ Nascentes quotes him from Rev. d. Fil. Port. 2.104.

⁴⁹ Dicionário Etimológico da Língua Portuguesa (Rio de Janeiro, 1932).

⁵⁰ J. Alemany Bolufer, Diccionario de la lengua española (Barcelona, 1917) qualifies this interpretation as possible. There is no reference to *quejar* in the body of the text of Estudio elemental de gram. hist. de la lengua esp. (Madrid, 1911).

⁵¹ See An Etym. Vocab. to the Libro de Buen Amor.

⁵² V. García de Diego, Elementos de gramática histórica gallega 49 (Burgos, [1909]). The question is not taken up in Elementos de gram. hist. cast. 45 (Burgos, 1914). There may be implicit approval of his previous opinion in his failure to include *quejar* in the list of words reflecting [stj], see Homen. Menéndez Pidal 2.16-8.

⁵³ J. M. Aguado, Glosario sobre Juan Ruiz (Madrid, 1929).

⁵⁴ F. Krüger, Einführung ins Neuspanische (Leipzig, 1924), section on etymology and word-formation (not at present accessible to me), and El dialecto de San Ciprián de Sana-bria: monografía leonesa 81 (Madrid, 1923).

⁵⁵ E. H. Tuttle, Spanish *caja*, *quejar*, *quijada*, HR 5.349.

⁵⁶ See the 14th, 15th, and 16th editions, of the years 1914, 1925, and 1939 [1936] respectively; the 13th ed. is not accessible. Pagés also gives this etymology. Compare the similarly cautious judgment of Alemany, who may be responsible for the entry in the Acad. Dict.

⁵⁷ Gröber's Grundriss¹ 1.718. On *escarçar* < **excarptiāre*, see RL 3.143.

⁵⁸ Gröber's Grundriss³ 1.975.

⁵⁹ True, the consultation of the unusually condensed Portugiesische Grammatik is made difficult through the absence of an index; yet Nascentes' dictionary may to some extent serve as a key to Cornu.

⁶⁰ According to information provided by Nascentes.

of the word, most scholars being content with regarding either **questiāre* or *coaxāre* as the closest possible approximation to its base. Then Nicholson's assertion that **capiāre* underlies *quejar*,⁶¹ reiterated in rejoinders to his critics,⁶² precipitated a lively exchange of opinions. Mention has already been made of some who took up the old explanations; new theories were advanced by Spitzer and Rice. The former, narrowing down the range of acceptable etyma to **coactiāre*⁶³ and **quassiāre*⁶⁴ (and apparently unaware of the fact that Menéndez Pidal had previously occupied himself with **requassiāre*⁶⁵), finally declared himself in favor of the latter. Rice proposed to trace back *quejar* to another, purely hypothetical variety of **coaxāre*, which, he contended, branched off from *coactiāre* 'to constrain'.⁶⁶ L. Poston Jr. participated in the controversy without committing himself to any theory;⁶⁷ this had been the attitude taken years before by Hanssen.⁶⁸ Admittedly undecided had also been Monlau⁶⁹ and Zauner.⁷⁰ Several scholars, while dealing with problems of Hispanic phonology, failed to pronounce themselves on this question: Tallgren,⁷¹ Krepinski,⁷² Bourciez,⁷³ Guarnerio,⁷⁴ Nunes,⁷⁵ Williams,⁷⁶ and others.⁷⁷

⁶¹ G. G. Nicholson, L'évolution du groupe *ps* en provençal, Rom. 58.483-504.

⁶² G. G. Nicholson, Spanish *caja*, *quejar*, *quijada*, HR 7.72-5.

⁶³ See RFE 24.30-3. In favor of this etymon would speak the fact that the primary meaning of the word was 'to pursue, to oppress'. Spitzer recognizes the phonological difficulties presented by this etymology and somewhat reluctantly abandons it.

⁶⁴ Ibid. The author admits the incompatibility of **quassiare* > *quejar* and **bassiare* > *bajar*. He tries to eliminate the difficulty by tracing *bajar* to *bajo*, which Millardet, Rom. 41.247-59, connected directly with *bassus*, cf. *passer* > *pájaro*. Is Spitzer aware of the added complication presented by Ptg. *baixo*, *baizar*?

⁶⁵ See Orígenes del español² 93-5 (Madrid, 1929).

⁶⁶ C. C. Rice, Sp. *quejarse* 'complain', OSp. *quexar* 'constrain', HR 9.309-10.

⁶⁷ L. Poston Jr., *quexar*, HR 7.75-6. The opinion of this author as presumably expressed in his thesis (An Etymological Vocabulary to the Celestina, A-E, Univ. of Chicago, 1938) s.v. *aquezar* is unknown to me; the published abstract (1940) contains no reference to it.

⁶⁸ F. Hanssen, Spanische Grammatik auf historischer Grundlage 56 (Halle, 1910), only states that *quejar* cannot reflect **questiare*. There is no reference to *quejar* in Gramática histórica de la lengua castellana (Halle, 1913).

⁶⁹ P. F. Monlau, Diccionario etimológico de la lengua castellana (reprinted Buenos Aires, 1941).

⁷⁰ A. Zauner, Altspanisches Elementarbuch 39 (Heidelberg, 1908). In the 2nd ed. (Heidelberg, 1921) the word has been altogether omitted and so, too, in Romanische Sprachwissenschaft² 1.98-107 (Berlin-Leipzig, 1914). Uncertainty pervades also the note of Castro, HR 7.169-70, who questions the wisdom of tracing rigid dialectal boundaries in medieval Spain and assumes that *quexar* < **questiāre* may well have originated in the central, not only in the peripheral dialects, conceivably side by side with **quegar*.

⁷¹ O. J. Tallgren, Estudios sobre la Gaya de Segovia 49-52 (Helsinki, 1907).

⁷² M. Krepinski and V. García de Diego, Inflexión de las vocales en español 40 (RFE Anejo 3; Madrid, 1923).

⁷³ E. Bourciez, Éléments de linguistique romane² 400-78 (Paris, 1910); the 3rd ed. (1930) was not available for consultation.

⁷⁴ P. E. Guarnerio, Fonología romanza 420, 515 (Milan, 1918).

⁷⁵ J. J. Nunes, Compêndio de Gram. Hist. Port. (Coimbra, 1919; the 2nd ed. of 1930 was not available) and Crestomatia Arcaica² lxxviii, lxxxii (Lisbon, [1921]).

⁷⁶ E. B. Williams, From Latin to Portuguese (Philadelphia, 1938).

⁷⁷ P. Förster, Spanische Sprachlehre 17 (Berlin, 1880); A. Koch, Sibilanten und Palatale im Altspanischen nach den beiden Handschriften der altcast. Übersetzung des Codi 26-7

5. The inadequacy of most of the older explanations is so manifest as to make specific refutation unnecessary. The recent studies contain some information that is of genuine interest (e.g. Singleton's documentation from Alphonsine sources, as distinct from his, in the present writer's view, erroneous interpretation⁷⁸), but, in all fairness to their authors, it must be conceded that no nearly definitive conclusions have as yet been reached. Most of these contributions suffer from two weaknesses symptomatic of the present status of Hispanic word-studies: insufficient bibliographic preparation and exaggerated reliance on conjecture. Thus it is regrettable that none of the recent explorers was aware of the existence of Cornu's second theory. García de Diego's essay on the development of [ps] according to the stratum was overlooked by the scholars inclined to link *quejar* with *caja* and *quijada*. There was no reaction to Spitzer's proposal on the part of some writers who took up the issue after him. And as usual, students of Spanish have disregarded the findings of Portuguese scholars and conversely.

More serious and far-reaching in its effects is the second deficiency: the reliance on conjecture. To be sure, no etymologist, however cautious, will subscribe to a complete elimination of the conjectural method. As long as we have to deal with language periods which left no abundant record of popular speech, reconstruction of bases and intermediary forms will remain an integral part of lexical research and, let us further admit, possibly the most rewarding phase of the entire work. However, one improvement upon methods practiced at present by several Hispanic etymologists appears imperative:⁷⁹ conjecture must come only after all other sources of information have been exhausted. It is true that

(Univ. of Halle diss., 1910); W. J. Entwistle, *The Spanish Language together with Portuguese, Catalan, and Basque* (New York, 1938); J. Oliver Asín, *Historia de la lengua española*⁴ (Madrid, 1940); V. Šišmarev, *Očerki po istorii äzykov Ispanii* (Moscow-Leningrad, 1941); R. K. Spaulding, *How Spanish Grew* (University of California Press, 1943). R. Lapesa, *Historia de la lengua española* (Madrid, 1942) was not available for consultation.

⁷⁸ Credit is given here once and for all to Dr. Singleton for his excerpts from the *Primera Crónica General* and the *General Estoria*; this material has been freely used by the present writer. The collation with the originals revealed but few misprints. Open to criticism, however, are (1) his method of semantic analysis: the enumeration of twenty-odd meanings of *quejar* without reference to specific passages is of little use; (2) his misrepresentation of Jud's theory; (3) his failure to distinguish between adjectival (*a)quezado* and (*a)quezado* with verbal force as used in compound tenses of *aquejar*; (4) his reliance, in justifying a reconstruction, on Alphonsine material, anonymous and standardized. Such material, while valuable, must be supplemented by excerpts from sources susceptible of more accurate localization.

⁷⁹ This danger was clearly sensed by Meyer-Lübke twenty years ago (RLiR 1.21): 'Allzu sehr gilt etymologie als ein rätselraten, wird das wort nicht in seiner ganzen umgebung geprüft, allzu wenig auch untersucht, was schon früher darüber gesagt worden ist, und der versuch gemacht, alte erklärungen zu widerlegen, die neue zu begründen. Gilt auch hier die sog. intuition mehr als beweisführung, so wird, da die intuition ja nicht bei allen gleich ist, namentlich eine intuition nicht so einfach nachempfunden und übernommen werden kann, allmählich ein vollständiges chaos eintreten oder ein wüster dilettantismus, der uns in die zeit vor Diez zurückwirft.' Unfortunately, much of the research done in Hispanic etymology is still amateurish.

students of Hispanic lexicology are less fortunate than some colleagues in related fields, in that no nearly satisfactory historical dictionaries are available to them; but texts covering the late Middle Ages exist and have largely been made accessible, so that the problem of marshaling evidence has simply become one of time and labor.

Special caution should be exercised in introducing hypothetical bases.⁸⁰ Experience shows that most proposed reconstructions are later discarded as unjustifiable. An irreducible nucleus of Romance etyma unrecorded in Latin will, of course, persist; but the trend is toward identification of genuine Romance with genuine Latin words, and the chances are that within a few decades much of what is now conventionally (and conveniently) called 'Vulgar Latin' will be discarded. The successful substitution of a recorded for a hypothetical base is a step forward in our science. For a variety of reasons, such progress can today be achieved in Ibero-Romance more easily than elsewhere.⁸¹ Now, *que(i)xar* happens to be limited to the Iberian peninsula, or rather to its center and west, since it penetrated late into Basque⁸² and into Valencian.⁸³ It may therefore be used as a model case for investigations based on a careful collection of recorded material.

⁸⁰ It will be observed that most of the hypothetical bases end in *-iäre*. There has been a real epidemic of questionable reconstructions of *-iäre* verbs. The reason for this vogue is transparent: our knowledge of palatalization in Romance is still inadequate. The dispensability of **pulsäre* has been admitted by Zauner, RFE 16.154-60, and Brück, RFE 17.1; both of them inclined to trace Sp. *pujar* to *pulsäre*. For the latest summary of the state of research on palatalization in Ibero-Romance, see Menéndez Pidal, *Manual* 44-50; a penetrating but hardly definitive analysis of the phenomenon in the Pan-Romantic perspective has been offered by E. Gamillscheg, *Zur Palatalisierung im Romanischen*, in *Studies for W. A. Read* 183-200 (Louisiana Univ. Press, 1940).

⁸¹ Not only because the phonological shifts are less numerous and complicated than, for instance, in French and in Roumanian, but also because the Ibero-Romance lexicon largely reflects the not yet conventionalized Republican Latinity. Gröber's theory has been revived in recent years, explicitly by J. Bonfante, *L'origine des langues romanes*, *Renaissance* 1.573-88 (New York, 1943) and implicitly by J. Corominas, *Espiguelo de latín vulgar*, AIL 2.

⁸² R. M. de Azkue, *Diccionario vasco-español-francés* (Bilbao, 1905-6) lists *keišadura*, *keišamendu* 'inquietud', *keišarazi* 'molestar', *keišatu* 'lamentarse, apresurarse', *keišu* 'apuro, inquietud; violento; queja, lamento', with pertinent quotations from texts and references to modern dialects. These formations and especially some of their meanings seem to reflect 12th- and 13th-century Castilian rather than Modern Spanish. A wider variety of less accurately classified offshoots of the Romanic *quez-* is offered by I. F. de Aizkibel, *Diccionario basco-español s.v. keja* (Toulouse, 1884), including some figurative uses unknown to Spanish. How Romance words were bound to experience considerable semantic modifications by slowly penetrating into Basque over a period of centuries, has been discussed by H. Schuchardt, *Baskisch und Romanisch: Zu De Azkue's baskischem Wörterbuch*, I. Band 45-58 (ZPh. Beiheft 6; Halle, 1906). Notice the contrast to the more recent and more rapid penetration of Castilianisms into Valencian and Catalan.

⁸³ *Aqueixar* 'pain, ache' penetrated around the year 1500 into Valencian, see the quotation from *Cançoners satírics valenciá dels segles 15 y 16*, ed. R. Miquel y Planas, p. 311 (Barcelona, 1911), in A. M. Alcover and Fr. de B. Moll, *Dicc. cat.-val.-bal.* 1.765; no further data are supplied by *Dicc. Aguiló* and *Dicc. Balarí*. From E. Juliá Martínez, *Problemas lingüísticos en el reino de Valencia*, BRAE 8.322-36, we gather that the first official document

6. The procedure adopted in the present essay is to describe the use of *que(i)-xar* and its congeners with all possible attention to chronological and dialectal variations, and, on the basis of such knowledge as is obtainable, to state a few definite conclusions concerning its etymology and to suggest various others. There will be a dual presentation of the material available, because of the intricacy and the significance of the problem involved: first, a purely objective classification of the formations encountered in ancient texts and the records of modern dialects; second, a more condensed survey with emphasis on characteristic data illustrative of the theory suggested by the writer. The first presentation is strictly descriptive and comparable to the map of a linguistic atlas; the second is interpretative. This method, applicable only in exceptionally difficult cases, entails the disadvantage of requiring considerable space; its advantage is obvious, since it provides an unbiased record of findings, from first-hand sources, of every possible vestige of the stem under study. Thus, even if the interpretation should not be found acceptable, or if further elaboration should be required, fellow-workers interested in the problem will find a body of data enabling them to re-examine the entire issue.

These data will be discussed in the following order: Old Spanish formations first, their Old Portuguese counterparts next, and finally reflexes in peninsular, American-Spanish, and Judeo-Spanish dialects. Within each section the major branches of the word family *que(i)xar*, *aque(i)xar*, *reque(i)xar*, *arrequer(i)xar* will be dealt with separately. The whole will be preceded by a brief discussion of various words showing a real or apparent resemblance to the *que(i)x-* stem.

II. *Que(i)x-*, *quix-*, *ques-*, AND SIMILAR STEMS IN IBERO-ROMANCE

7. Attention has been given in recent years to *caja* 'box' and *quijada* 'jaw' in connection with the controversy over *quejar*; it is our first duty, then, to list characteristic reflexes of these words in the Hispanic dialects. There exists a

issued in Castilian in the city of Valencia dates from 1416. On *queixa*, *queixarse*, *queixit* < *queixido*, *queixó* < *queixón*, *queixós* < *queixoso* in Modern Valencian, see J. Escrig y Martínez and C. Llombart, *Dicc. valenc.-cast.*³ (Valencia, 1887).

There exist various phonetic, phonological, and morphological studies of Valencian, e.g. by J. Hadwiger (ZRPPh. 29.702-31), J. Saroihandy (BHi. 8.297-303), A. Grieria (BDC 9.4-32), and T. Navarro Tomás (RFE 21.113-41); the material that they contain on lexical relations between Valencian and Catalan is small. Standard Catalan includes a variety of formations based on the *queix-* stem, all of them borrowed from Castilian (whether directly or through the agency of Valencian, is a matter of controversy). Thus P. Fabra, *Diccionari Ortogràfic*² (Barcelona, 1923) list *queixa*, *queixar-se*, *queixós*, *queixosament*; these words reappear in *Dicc. encicl. de la llengua cat.* (Salvat). But there are no traces of the stem in Old Catalan, see *Dicc. Aguiló*. On the other hand, *plangere* > *plànyer* was firmly established in Old Catalan (as it was, indeed, in Gallo-Romance and elsewhere) and also in Old Aragonese, see Borao, s.v. *plañir*; in each language it experienced an extension of meaning showing how deeply rooted it was in the East of the Peninsula, see L. Spitzer, *Lexikalisches aus dem Katalanischen und den übrigen iberoromanischen Sprachen* 103 (Bibl. dell' 'Arch. Rom.' 2.1; Geneva, 1921). Borrowings from Spanish failed to develop peculiar meanings in Catalan, but influenced native formations in their semantic development, see Meyer-Lübke, *RLiR* 1.30-1.

Portuguese word *queixo* 'chin', which previously meant also 'jaw',⁸⁴ OPtg. *queizoo* is presumably just a variant graph of the same word,⁸⁵ not a separate formation, as Nunes surmised.⁸⁶ A related formation of identical meaning, encountered in the ancient *cancioneiros*, is *soqueixo*.⁸⁷ Confusion of words designating neighboring parts of the human body or physical defects is not surprising in the light of the researches by Zauner,⁸⁸ Wartburg,⁸⁹ and Kahane.⁹⁰ Now, in Catalan and in Valencian there exists the cognate word *queix* 'jaw'.⁹¹ In terms of linguistic geography we are thus dealing with a case of lateral areas as defined by Bartoli.⁹² There can be little doubt that the *queixo* type originally covered the entire peninsula. It has been overlaid by various suffixal formations. In Old Portuguese, *queixada* and *queixo* co-existed for a while,⁹³ but the latter prevailed. Not so in Castilian, where *quexada*⁹⁴ and *quixada*⁹⁵ were from the begin-

⁸⁴ See *Cancioneiro da Ajuda*, line 3400; *Docum. de Pendurada* (A.D. 1312), *Elucid.* 2.171.

⁸⁵ See *Côrte Imperial* 5.

⁸⁶ See Crest. Arc.,² glossary. Nunes retraced *queizoo* to **capsulu*, presumably on the analogy of cases like *diabolu* > *diaboo* (*Barlam* fol. 13vo, S. Bento fol. 15), *periculum* > *perigoo* (*Graall* fols. 17, 30; S. Bento fol. 104) beside *prigoo* (*Barlam* fol. 12vo; *Cod. Alc.* 200 fols. 204vo, 206vo). However, the graph *emmiigoo* < *inimicus* (*Antiocho* 72) tends to prove that -oo can be interpreted as a reverse spelling, especially in a transitional period like the late 14th and the 15th centuries. Latin has only *capsula*, *capsella* (*ThLL* 3.363); *capsellum* is recorded once (*CGL* 5.354) and is, according to Goetz, in need of emendation. On cases like *parvoo* < *parvulo*, *musgoo* < *müsculo*, *triboo* < *thuribulo*, *estimoo* < *stimulo*, *diagoo* < *diacono* in Old Portuguese, see C. Michaëlis de Vasconcelos, *RL* 3.179; on the outgrowths of *archidiacono*, *baculo*, **besticulo*, *capitulo*, *diabolo*, *periculo*, *populo*, *rotulo* in Old Galician, see R. Rübencamp, *A Linguagem das Cantigas de Santa Maria*, de Afonso X, o Sábio, *BF* 1.339-41.

⁸⁷ See *Cantigas d'amigo* No. 462 (i.e. *Cancioneiro da Vaticana* Nos. 855, 1250) and *Cancioneiro da Ajuda* fol. 150b, line 17; C. Michaëlis in her glossary supplies the translation 'mandíbula'.

⁸⁸ A. Zauner, *Die romanischen Namen der Körperteile*, *RF* 14.339-530, especially 398-409.

⁸⁹ W. von Wartburg, *Die Ausdrücke für die Fehler des Gesichtsorgans in den romanischen Sprachen und Dialekten* 2 (*Univ. of Zurich diss.*, 1912).

⁹⁰ H. R. Kahane, *Bezeichnungen der Kinnbacke im Galloromanischen* (*BBRPh.* 2.2; *Jena-Leipzig*, 1932); *Designations of the Cheek in the Italian Dialects*, *LANG.* 17.212-22.

⁹¹ See *Dicc. Aguiló* 6.273 and, especially for the figurative sense, *Escrig-Llombart*, *Dicc. val.-cast.* s.v. On *capsu* > *queix*, see W. Meyer-Lübke, *Das Katalanische, seine Stellung zum Spanischen und Provenzalischen* 37-9 (*Heidelberg*, 1925).

⁹² See M. Bartoli, *Per la storia del latino volgare*, *AGI* 21.1-58, especially 9-32; *idem*, *Introduzione alla neolinguistica: principi, scopi, metodi* 6-9 (*Florence*, 1925); G. Bertoni and M. G. Bartoli, *Breviario di neolinguistica* 68-70 (*Modena*, 1928); A. Dauzat, *La géographie linguistique* 38-41 (*Paris*, 1922); E. Gamillscheg, *Die Sprachgeographie und ihre Ergebnisse für die allgemeine Sprachwissenschaft* 29-33 (*Bielefeld-Leipzig*, 1928); and the various studies by Gilliéron.

⁹³ *Livro de Citraria*, lines 706, 724, 743; *Tratado de Cetraria do Rei Dancus*, chapter 5, line 5; *Livro de Falcoaria* 44, 65, 66; *Livro de Marco Paulo* fol. 73vo; Coudel Moor, *Canc. Ger.* 1.176; Nuno Pereyra, *Canc. Ger.* 1.299. *Mod. Leon.* [kejšaša] in San Ciprián, see Krüger's study 86.

⁹⁴ An example from the *Prim. Crón. Gen.* is offered by Ford, *Old Spanish Readings* 42. See also Alex. O., quatrain 741c; *Conf. del Amante*, fols. 56ro, 321ro, 407ro.

⁹⁵ D. Juan Manuel, *Libro de la Caza* 9, 11, 12, 57; Rey Guillelme, fol. 36ro; *Maynete*, chapter 3; *Castigos e documentos*, *BAE* 51.131a; *Evangelista*, *ZRPh* 1.230; *El Corbacho* 98, 213, 274; A. de Palencia, *Dos tratados* 1.96; *Cancionero de Baena* 80, 106, 132. *Quizada* stands

ning of the literary period the standard words for 'jaw'. This special use of the suffix *-ada* has been studied by Collin.⁹⁶ Another type is represented by OPtg. *queixal*,⁹⁷ OSp. *quezar*,⁹⁸ with a use of the suffixes *-al*, *-ar* peculiar to Ibero-Romance;⁹⁹ remnants of this type in modern dialects and some related formations have been studied by García de Diego.¹⁰⁰ In the West and in the Center this formation stands for 'jaw', but in the East it means 'tooth'; Catalan lexicographers list a wealth of derivatives from *queixal* 'tooth',¹⁰¹ and Giera localizes the border-line between this formation and Eastern Aragonese *muela*,¹⁰² without knowing that *quezarada* 'chattering of teeth', found in the Libro de la miseria del omne¹⁰³ and even in 16th-century texts,¹⁰⁴ testifies to its original extension much farther West. There exists also some literature on other derivatives like *barbaquejo* 'small chain forming part of the head harness' and its variant forms.¹⁰⁵

Sp. *caja*, Ptg. *caixa* represent a type of much wider use in the Romanic languages. Its connection with *queixo*, *quizada* is brought out by such dialectal reflexes as Gal. *queixón* 'cajón' (Cuveiro Piñol) beside Sp. *cajillas* 'quijadas'.

for 'gena, mandibula, mala' in Glosarios latino-españoles, ed. Castro, T745, P131; T843, P132; E1478.

⁹⁶ See Le développement de sens du suffixe *-ata* 199.

⁹⁷ See Canc. Geral 1.298.

⁹⁸ Libro de Alex. P, quatrain 2379b (O 2237b has *giar*), O 980b; Libro de Buen Amor, quatrain 1416c. Old Leon. *quizar*, *quezar*, *quizada* are found in the Libro de los Caballos, ed. G. Sachs, p. 23, line 16 (Madrid, 1936). Sp. *quizalero* is documented in Rodríguez Marín, Dos mil quinientas voces.

⁹⁹ The use of *-al*, *-ar* to designate a location has been discussed by J. Alemany Bolufer, Tratado de la formación de palabras en la lengua castellana 13-5 (Madrid, 1920; reprinted from BRAE) and by M. L. Wagner, Zum spanisch-portugiesischen Suffix *-al*, VKR 3.87-92. On Sp. *cachalote* < *quixal(ote)*, see Gonçalves Viana, Apostilas 1.188.

¹⁰⁰ V. García de Diego, Contribución al diccionario hispánico etimológico 43 (RFE Anejo 2; Madrid, 1923). Of especial interest are *desquijerar* 'romper las quijadas', *quijera* 'correa de la cabezada del caballo', *quijero* 'lado en declive de la acequia o brazal'. The latter formation will be remembered in discussing the occurrence of the *que(i)x-* stem in toponymy.

¹⁰¹ Thus the Dicc. encicl. de la ll. cat. 4.144 lists *queixal* 'diente, muela'; *queixalada* 'mordisco, bocado'; *queixalar* 'mossegar'; *queixalejar* 'donar queixalades'; *queixaler* 'rel. als queixals'; *queixalera* 'part de la barra on hi ha els queixals'; *queixera* 'barbuquejo, carrillera'; *queixut* 'quijarudo' (some words are identified by Castilian, others by Catalan equivalents). Most of these formations are accepted by P. Fabra, Diccionari ortogràfic² (Barcelona, 1923).

¹⁰² A. Giera, La frontera del catalán occidental, BDC 6.17-37, 7.69-79 (especialmente 7.77).

¹⁰³ Quatrain 103ab: *Quando viene el evierno que faze malas eladas / Apriémelo el grand frío e fiere grandes quezaradas* 'when winter comes bringing with it bitter frost, the severe cold tortures him and his teeth chatter'. *Quezarada* [cf. *cazarada* Alex. P, quatrain 768c] is completely misunderstood by the editor, whose philological training is so inadequate as not to permit him to localize his unmistakably Aragonese text in spite of the preservation of *pl-* and other equally characteristic features. It is a rare but perfectly normal derivative, with the suffix *-ada*, appended to the name of a limb, serving to express the performance of a single movement.

¹⁰⁴ For an example from Francisco Truchado, Honesto y agradable entretenimiento de damas y galanes fol. 87 (Granada, 1582), see Rodríguez Marín, Dos mil quinientas voces s.v.

¹⁰⁵ See the note by García de Diego in RFE 7.147-8. The etymon suggested is **barba-capsu*. This note throws light on word composition in Old Spanish, debated years ago by

The semantic relation has been illustrated by Spitzer in his note on Sp. *carrillo*.¹⁰⁶ Similarly fluctuating reflexes have been observed in the cases of *fascis* 'sheaf',¹⁰⁷ *maxilla* 'cheek',¹⁰⁸ and **taxūgo* 'badger'.¹⁰⁹

There is hardly any doubt that *caixa* and *queixo* (and their equivalents in other, less conservative dialects) are outgrowths of Lat. *capsa* and *capsus* respectively.¹¹⁰ Some scholars, it is true, have attempted to account for the divergent development of the *ps* cluster in the different branches of this word family by introducing a hypothetical base **capseu*¹¹¹ or by assuming that a Provençal cognate has been absorbed by the Hispanic dialects.¹¹² In the light of the researches of García de Diego¹¹³ and Griera,¹¹⁴ these assumptions appear gratuitous.

Munthe and Baist. Of especial interest is the mention of a variant form *barbicacho*, presumably replacing **barbicaço* and arrived at through the agency of the suffix *-acho*, of uncertain origin and widely debated in connection with the etymologies of *borracho* 'drunk' and *muchacho* 'boy'. Cf. the Dicc. Hist. s. vv. *barbicacho*, *barbiquejo*, *barboquejo*, *barbuquejo*.

¹⁰⁶ See L. Spitzer, Esp. *carrillo*, ptg. *carrilho* 'joue', esp. *carrillera* 'mâchoire', RFE 11.316. Cf. Leomarte, Sumas 115, 144.

¹⁰⁷ Compare Sp. *faz*, *haz* with Ptg. *feize* (beside *fazina*, *fazinar*). In Old Leonese *feize* is recorded with the meaning of 'burden; unborn child'. On this word family, see Apostilas aos Dicion. Port. 1.442.

¹⁰⁸ The ancient standard form appears in El Cavallero Zifar 201, 206; for Old Aragonese *maxilla*, see El Libro de la Miseria, quatrain 11b.

¹⁰⁹ On Sp. *tasugo*, Ptg. *teizugo* (according to some, a cross of VLat. **taxōne* and Visigothic **pahsuks*), see the controversy between Bruch and Gamillscheg, summarized ZFSL 59.97-9. OPTg. *texugo* is found Canc. Ger. 1.182. Cf. Kuhn, RLiR 11.54.

¹¹⁰ The connection between *quijada* and *capsu* was guessed by Covarrubias over three centuries ago; it was known to Cabrera, Diez (Gramm. d. rom. Spr.¹ 1.259), Monlau ('*quijada* es, de consiguiente, el hueso que tiene los encajes, las cajas o alvéolos para recibir los dientes'), and has been reaffirmed by the majority of modern scholars, including Coelho, Michaëlis, Cornu, Meyer-Lübke, Hanssen, García de Diego, Nascentes, Williams. *Capsa* occurs Gen. Est. 1.359b; for *capsela*, see Berceo, Signos 22.

¹¹¹ Zauner, Altspan. Elementarbuch¹ 39-40 retraced *caja* to **capsea*. Acceptance of **capsea* and *capsu* as etyma of Sp. *caja*, Ptg. *caixa* and Sp. *quij-ada*, Ptg. *queixo* respectively, was advocated by Tuttle, HR 5.349. Nicholson, by way of contrast, claims that **capsea* in native development would have yielded **queja*. Wartburg's derivation of Sp. *caja* < **capsea* (FEW 2.314-5) was criticized by Rohlf, ASNSL 173.283.

¹¹² This is the viewpoint of Zauner in Altspan. Elementarbuch² 43, and of Nicholson, who does not hesitate to label *bajo* and *bajar* also as Provençalisms. A convincing refutation of this theory by García de Diego is found Homen. Men. Pidal 2.18-9.

¹¹³ Ibid. Analyzing the products of bases like *capsa*, *gypsu*, *ipse*, the author distinguishes between (1) cases of early confusion between *-ps-* and *-cs-*, permitting *capsa* to be mispronounced **cacsá*; and (2) cases of a more faithful preservation of the original consonant cluster, with ultimate assimilation of the *p* to the following *s*. **Cacsá* yielded **caisa* [kajsa]. According as the [s], palatalized by the preceding [j], absorbed the latter more or less rapidly, this [j] could exert its influence on the preceding vowel; hence *caja* beside *quijada* and Gal. *barbiqueijo*. *Cacharita* 'vaina de las alubias' (Santander) and *barbicacho* are explained as due to a 'refuerzo de palatalización'; for a different interpretation by the same author at an earlier date, see footnote 105. The [č] may also represent an attempt to imitate, in borrowing from peripheral dialects, the sounds [ž] and [ǰ], lost in the center.

¹¹⁴ Dialectal reflexes of *capsa*, *fascis*, *lacte* in Catalan are studied in A. Griera i Gaja, La frontera catalano-aragonesa: Estudi geogràfic-lingüístic 58-60 (Barcelona, 1914). In the West of this territory [aj] prevails, in the East [ej], but it is impossible to draw neat boundaries.

*Capsa*¹¹⁵ and *capsus*¹¹⁶ are well documented formations, whose semantic development presents no difficulties. In dealing with *queixo*, *quijada*, and *caja* we are thus, fortunately, on solid ground.

While scholars have recently discussed these formations in connection with *que(i)xar*, they have done so exclusively with the purpose of clarifying certain phonological issues; a genetic relation between the nouns and the verb has, to our knowledge, never yet been suggested. We shall attempt to demonstrate that *queixo* 'jaw', which must have existed in preliterate Castilian also, underlies (a)*quexar* 'to press, to besiege, to torment', literally 'to squeeze between the jaws'.

8. The acceptance of this theory does not necessarily mean that the earlier assumption of a link between *quexar* and *queror quaerō* should be completely discarded. To begin with, there is inscriptional evidence of the use of *questus* in Hispano-Latin.¹¹⁷ Specifically, *quexdar* 'plangere', used in much the same way as *que(i)xar*, has been extracted by Simonet from Mozarabic texts.¹¹⁸ The Mozarabic dialect is known to have maintained the Latin tradition with exceptional faithfulness.¹¹⁹ Phonologically *quexdar* can be retraced to Lat. *quaesitāre*,¹²⁰ a formation actually recorded by Priscian,¹²¹ though admittedly not nearly as frequent as *quaeritāre* (compare *quaesō* beside *quaerō*).¹²² The suffix *-itāre*

¹¹⁵ On *capsa* consult ThLL 3.361-2, where four connotations are distinguished: (1) 'instrumentum ad libros condendos' (Cicero, Horace, Juvenal, Statius, I. Paulus iurisconsultus, Passio Martyrum Scillitanorum ca. 180 A.D., P. Porphyrio [4th cent.], Gregory of Tours); (2) 'receptaculum variarum rerum' (Pliny, Martial, Querolus [5th cent.], Marcellus medicus [after 400], Ennodius [died 521], Pseudo-Prosperus [ca. 415], Dracontius [end of 6th cent.]); (3) 'pars carpenti, ploxenum, capsus' (Paulus Diaconus); (4) 'ima navis pars' (Passio Felicis episcopi). The second meaning survives in Romance. *Capsarius* and *capsilago* are recorded Latin formations.

¹¹⁶ On *capsus* see ThLL 3.363. The redactor of the article was Probst, but Meyer-Lübke supplied the Romance material; at that time (ca. 1906) the Italian and the Old French reflexes were known to him, but not the Ibero-Romance. Four connotations are distinguished: (1) 'ploxenum': Vitruvius, Glosses, Isidor, and Paulus Diaconus; (2) 'cavea': Velleius Paterculus, Anthologiae Lat. carmen No. 235; (3) 'vesica ad aliquid includendum': C. Apicius; (4) 'pars ecclesiae': Gregory of Tours. The second and third meanings seem to underlie the Hispanic word. In REW² there is surprisingly enough an attempt to separate *capsum* (§1660) from **capseum* (§1659c); equally inconvincing is the treatment of *capsa* (§1658) beside **capsea* (§1659a); the scientific integrity of Meyer-Lübke compelled him to admit his own doubts of the correctness of his view.

¹¹⁷ A. Carnoy, *Le latin d'Espagne d'après les inscriptions: étude linguistique* 71 (Brussels, 1906). Cf. OSP. *quisto* 'wanted, loved'.

¹¹⁸ F. J. Simonet, *Glosario de voces ibéricas y latinas usadas entre los mozárabes* 472 (Madrid, 1888). The author unnecessarily posits the base **questare*, produced from *queri* on the analogy of *[*]quaestare ~ quaerere*. The termination *-xdar* is quite unusual in Romance words, but may have found a favorable environment in the Arabic world of Southern Spain. A. R. Nykl, *A Compendium of Aljamiado Literature* (reprint from RH 77) quotes (183) *açajdar*, *açejar* 'to worship, to do homage' < Ar. *sağğada*. Compare the development of **amicitāte* > Ptg. *amizade*, *recitāre* > *rez(d)ar*, *placitu* > *plaz(d)o*, **accipitāre* > *aç(t)or*.

¹¹⁹ See Menéndez Pidal, *Orígenes del español* 434-61.

¹²⁰ On *-itāre* in Ibero-Romance see Meyer-Lübke, *Rom. Gr.* 2.612-3; Hanssen, *Gram. hist.* 158.

¹²¹ See Forcellini and De Vit 5.16.

¹²² See the abundant illustrations in K. E. Georges, *Ausführliches Lateinisch-Deutsches Handwörterbuch* (Hannover-Leipzig, 1918). The recorded meanings are 'to look for, to

was hardly productive in Romance except in the earliest ('Vulgar Latin') period.¹²³ These facts seem to indicate that *quaesitāre* took root in Spain presumably at an early date and left traces in the archaic Mozarabic dialect. By way of speculation we may say that this ancient *quexdar* has conceivably been overlaid by the neologism *aque(i)xar*, not without having exerted some influence on the semantic development of the latter word. This development, as we shall attempt to show, can be accounted for without the intervention of *quexdar*, yet the possibility of a cross, however remote, seems worth mentioning.

procure, to inquire, to earn'; the word occurs in Plautus, Terence, Catullus, and likewise in authors of the imperial era. If *quexdar* actually reflects *quaesitāre*, of which there is only vestigial evidence, we would have to surmise the semantic development 'to ask insistently' (cf. *quaesō* 'I pray') > 'to complain'.

¹²³ Sp. *alentar*, dial. *alendar* 'breathe, revive, encourage', has been retraced to **anhēlitāre* through **(h)alēnitāre*; see A. Gassner, *Das altspanische Verbum* 11 (Halle, 1897); A. Castro, RFE 6.340; García de Diego, *Contribución* 23, 94; REW¹ §473a. (D) *esperar* 'to awake' used to be derived from **ex-pergitāre* (e.g. Gassner 10); but Jud, RLiR 1.186, posits **expertāre* instead. The etymon *repeditāre* of Sp. *reventar* 'to burst', suggested by Cornu, has been mostly rejected, see REW¹ §7221. **Vilitāre* (*Contribución* 175) is not necessary to account for *aviltar* 'to vilify' in view of *viltad* 'meanness'. Gal. *sandar* 'to heal' has been connected with *sānitāre*, see RL 3.155; cf. Gal. *amandar* < *mānitāre*, RL 3.155. **Aequulitāre* is not needed to explain *igualdar* 'to make even' on account of *igualdad* < *aequalitāte*, ibid. Of greater interest is the derivation Gal. *achandar* 'to flatten' < *plānitāre*, ibid. Cat. *esquerdar* 'to split' may represent *crepitāre*, see *Contrib.* 57, REW¹ §7979. Cf. REW¹ §§62, 63, 87, 111a, 1635, 1793, 7185, 7726, 9191, 9446, 9452. The reflexes of *ambitāre*, *cōgitāre*, and **recapitāre* are well known. As will be shown in a forthcoming essay, Sp. *lerdo*, *enlerdar* contain the same suffix.

Lat. *-itāre* as a rule yielded *-dar*, occasionally *-tar*; the exact conditions of the syncope remain to be studied. More material is available on *-icāre*, where a similar situation prevails, with *cabalgar*, *folgar*, *madrugar*, *otorgar*, *saborgar*, *salgar*, *tragar* on the one hand and *cascar*, *mascar*, *triscar* on the other hand, see Hanssen 157, Alemany Bolufer, *Tratado* 143. For further orientation the following list of recorded and reconstructed bases may be of service (mention of hypothetical bases in this connection must not be construed as implying their acceptance in each case; ref. to §§ are to REW¹): **abbrachicāre* §13, **adānicāre* *Contrib.* 15, *albicāre* §321, *amāricāre* §401, **annōdicāre* §428 (as against **innōdicāre* *Contrib.* 100 and Spitzer's **inossicāre* RFH 3.271-2, **appressicāre* *Contrib.* 24-5 and §554a, *auctōricāre* §775, *bullicāre* *Contrib.* 39-40, *caballicāre* §2439, **clausicāre* RL 3.139, *commūnicāre* §2090, *dēfricāre* §2520a, *dēlicāre* §2536, **dērādicāre* §2577, **ēbullicāre* *Contrib.* 67, *ēmollicāre* RL 3.132, *ēmorsicāre* *Contrib.* 69, *ērādicāre* §2887, **exalbicāre* *Contrib.* 74-7, *expūlicāre* RL 3.132, **extussicāre* *Contrib.* 77, *extericāre* RL 11.51-2 (C. Michaëlis rejects this etymon, proposed by Parodi and Gonçalves Viana), **fizicāre* §3336, *follicāre* §3417, *fullicāre* *Contrib.* 86, **fūricāre* *Contrib.* 87 and §3597, *gemicāre* *Contrib.* 88, **imbarricāre* §4277, *impedicāre* *Contrib.* 96 (a blend of **impicāre* 'to pitch' > *a-em-pegar* with *pice* > *pez* would better explain the formation in question), **impullicāre* RL 3.132, **integricāre* §4481a, *iūdicāre* §5431, *mōlicāre* *Contrib.* 122, **mollicāre* *Contrib.* 122, *mordicāre* §5680, *morsicāre* RL 3.186 and §5690, **pendicāre* RL 3.168, *Contrib.* 129, and §6384, *pūlicāre* §6817, *puticāre* *Contrib.* 135, **putricāre* *Contrib.* 136, **quassicāre* §6941, **rāsicāre* §7074, **remussicāre* RL 3.168 and §7205, **reversicāre* *Contrib.* 144-5, **revolvicāre* §7285, **rosicāre* *Contrib.* 146 and §7380, **salicāre* §7528, **stanticāre* §8228a, **tussicāre* *Contrib.* 168, §9014, **vānicāre* §9137a, **visicāre* *Contrib.* 176, *volvicāre* *Contrib.* 178. On the close relation between *-itāre* and *-icāre* cf. §9451, 9452 (**vomīcāre*, *vomitāre* 'to vomit'). A definitive study on either suffix must be paralleled by an investigation of the syncope of the intertonic syllable in Ibero-Romance, comparable to Miss Seifert's monograph on proparoxytones in French. For further data, see the essay *Hispanic Reflexes of Latin morsicāre*, to appear in PhilQ.

9. Certainly unrelated to our stem is *quixote* 'cuissart', in spite of the opinion to the contrary of such an authority as Gonçalves Viana.¹²⁴ The etymology of this word naturally aroused the curiosity of Cervantes.¹²⁵ *Quixote* is documented from Juan Ruiz to Covarrubias.¹²⁶ It goes back to OFr. *cuissot*,¹²⁷ even as its English cognate reflects OFr. *cuissart*, from *cuisse* < *coxa* 'thigh', a stem found in Portuguese, but not in Spanish.¹²⁸ The formation does not seem to have passed through Old Catalan, where, on the authority of Giese, *gambra*¹²⁹ and *cuxera*¹³⁰ were used instead.

It is regrettable for our purposes that the present knowledge of the origin of *quejigo* 'species of oaktree' should be limited to mere guesses, in spite of the studies by C. Michaëlis,¹³¹ V. García de Diego,¹³² and lately P. Aebischer.¹³³ Actual confusion between *quejigo* and *quejido* 'complaint', due to the weakening

¹²⁴ A. R. Gonçalves Viana, *Apostilas aos Dicionários Portugueses* 2.322-3 (Lisbon, 1906); he interprets *quixote* as 'mentonnière'.

¹²⁵ See *Obras completas*, ed. Schevill-Bonilla, 15.50, 55; cf. the edition of Don Quijote by Rodríguez Marín 1.97-8 (Madrid, 1916-7). *Querada* as a family name occurs in Poema de Alfonso XI, quatrain 2182a.

¹²⁶ It is absent from the oldest texts; see W. Giese, *Waffen nach der spanischen Literatur des 12. und 13. Jh.* (Hamburg, 1925). *Quiçote* 'superfemorale' occurs in Esc. 1859, *Glosarios latino-españoles*, ed. A. Castro.

¹²⁷ See Godefroy 2.399a.

¹²⁸ Cf. *coyza* Graall, fols. 24, 32; *coxa* Canc. Ger. 1.200; *coija* RL 12.7.

¹²⁹ W. Giese, *Waffen nach den katalanischen Chroniken des 13. Jh.*, VKR 1.140-82, especially 153.

¹³⁰ Idem, *Waffengeschichtliche und -terminologische Aufschlüsse aus katalanischen literarischen Denkmälern des 14. und 15. Jh.*, Homen. Rubió i Lluch 1.33-67.

¹³¹ C. Michaëlis de Vasconcelos, *Miscellanea de filologia e linguistica in memoria di Caix-Canello* 147 (Florence, 1886), suggested derivation from **quessiculu* < **querciculu* 'little oak' through Portuguese, without justifying the migration of the word.

¹³² V. García de Diego, *Contribución al diccionario etimológico español* 10-1 (included, with separate pagination, in the author's *Miscelánea filológica* [Madrid, n.d.]). According to this somewhat confused essay, *quejigo* is a cognate of Fr. *chêne* 'oak-tree'; it is classed as an outgrowth of **cassicu* < **caxicu*, a variant of **caxinu*, which in turn is said to be patterned after *frazinus* 'ash-tree'.

¹³³ This author occupied himself twice with the expressions for 'oak-tree' in Ibero-Romance. In *La forme dissimulée *cerquus < quercus dans le latin d'Espagne et d'Italie*, RFE 21.337-60, he regards **querquus* as the intermediate form, points to Central and Southern Italy as the radiation centers, concludes that the word was transplanted to Spain by maritime routes and through African Latin, and explains the preservation of **cerquus* in Italian and its elimination from Ibero-Romance, except for vestigial remnants, as due to the conflict on Spanish soil with homonymous *circus* 'circle'. In *Deux noms de lieu catalans d'origine religieuse Madremanya et Marquixanes*, Aebischer traces *quejigo* to **caxu* (BDC 22.49), thus opposing the view of V. Bertoldi, *Problèmes de substrat*, BSL 32.93-175, who was inclined to revive Schuchardt's theory of close relationship between *quejigo* and Basque *gastigar*, Srd. *costighe* 'maple-tree' (131). Bertoldi's interpretation was subsequently taken up by A. Kuhn, *Zur Gruppe Sp. quejigo, dial. cajigo* 'Eichenart', ASNSL 174.198-203, who concentrated on the phonological analysis of the *-ej-* group. Rohlf, in his editorial comment on Kuhn's note, posited the base **caxu* and, in an effort to explain the pre-Latin suffix, drew attention to Southern French (and Old Aragonese) *garric(o)* 'species of oak-tree' (classed as Gallic in REW³ §3690c).

of intervocalic voiced stops in Ibero-Romance,¹³⁴ is recorded in the Sayagués dialect as used by Lucas Fernández.¹³⁵ The dialectal reflexes of *quejigo* show a striking resemblance to those of *capsu*, *capsa*.¹³⁶

In large sections of the northwestern corner of the peninsula (exclusive of standard Portuguese) the product of *cāseu* 'cheese' and its congeners have evolved the same stem as *que(i)xar*.¹³⁷ Because of the lack of any conceivable association, no conflict between the two word families appears to have ensued.

The *quix*- stem appears in *quixar* 'bark', encountered in the Orden. de Granada; its Arabic prototype has been listed by P. de Alcalá.¹³⁸ Of demonstrably different origin is *quijera*, a late variant of *quisiera*, and like formations.¹³⁹ Whether the three words found in Spanish cant: *quejera* 'silk', *quejana* 'custom-house', and *quejeña* 'bank', have any bearing on the development of the stem under study, the writer is unable to determine;¹⁴⁰ no information to this effect has been discovered in the studies of M. L. Wagner covering this field.¹⁴¹ OSp. *queça* 'overcoat' has been traced by Steiger to an Arabic etymon.¹⁴²

The student of Spanish etymology must finally bear in mind that there exists a wealth of writings on the development of the sequence [stj] in Spanish dialects¹⁴³ and on the origin of OSp. *dexar*, Ptg. *deixar* 'to let, to leave'.¹⁴⁴

¹³⁴ Pertinent illustrations and references to older literature, along with a very original interpretation of the phenomenon, will be found in A. Alonso, *Equivalencia acústica*, BDHA 1.440-69.

¹³⁵ Cejador y Frauca, *Vocabulario medieval castellano*, gives references to the Academy edition.

¹³⁶ See Kuhn, op.cit., with references to his own field notes and to Krüger's *Die Hochpyrenäen*.

¹³⁷ For Galicia, see the dictionaries of Cuveiro Piñol and Lurgis Freire; for Western Asturias, see B. Acevedo y Huelves and M. Fernández y Fernández, s.vv. *queizo*, *queizeiro*, *requeizón*. In Old Portuguese *queijo* (Canc. Ger. 1.31) is recorded beside *requeizaria* in *O Livro Vermelho d'El Rei D. Afonso V*, Eluc. 2.190. See also Apostilas 2.310.

¹³⁸ See L. Egulaz y Yanguas, *Glosario etimológico de palabras españolas de origen oriental* (Granada, 1886).

¹³⁹ See R. J. Cuervo, *Apuntaciones críticas sobre el lenguaje bogotano* 553 (Paris, 1914); E. Köhler, *Sieben spanische dramatische Eklogen* (GRL 27; Dresden, 1911), No. 6, line 111.

¹⁴⁰ Recorded by L. Besses, *Diccionario de argot español* (Barcelona, n.d.).

¹⁴¹ Notes linguistiques sur l'argot barcelonais (Bibl. Fil. 16; Barcelona, 1924); Sobre algunas palabras gitano-españolas y otras jergales, RFE 25.161-81. Nor was J. Givanel i Mas, Notes per a un vocabulari d'argot barceloní, BDC 7.11-68, of any help.

¹⁴² A. Steiger, Contribución a la fonética del hispano-árabe y de los arabismos en el ibero-románico y el siciliano 205 (RFE An. 17; Madrid, 1932). See Alex. O, quatrain 598c, P, 625. Of Hebrew provenience, according to Tilander, is OArag. *casse(r)*, see Hom. Rubió i Lluch 1.331-42.

¹⁴³ See, among other sources, Menéndez Pidal, Rom. 29.336; idem, *Cantar de Mio Cid* 187; idem, *Orígenes del español* 312-4; Baist, Gr. Gr. 2 1.901; Meyer-Lübke, LGRPh. 22.298 and RLiR 1.15-6; Rohlf, ZRPh. 41.351-5; Steiger, BRAE 10.178; Jud, HMP 2.25-6; Tallgren, *Estudios sobre la Gaya de Segovia* 80; Zauner, Altsp. Elem. 2 47; Krepinski, *Inflexión* 40; García de Diego, HMP 2.16-8; Kuhn, RLiR 11.32-5, 46-50.

¹⁴⁴ Some of the latest opinions on that debated word are: F. Schürr, RF 53.27-41; C. C. Rice, HR 6.351-2; U. T. Holmes Jr., LANG. 17.69; M. L. Wagner, ZRPh. 62.70-6; Spitzer, AIL 2.13-6.

III. THE *quezar* BRANCH IN OLD SPANISH

10. *Quezar* occurs in Old Spanish both as a transitive and as a reflexive, but not ordinarily as an intransitive verb. . . An exception must be made in favor of the gerund *queizando* 'lamenting',¹⁴⁵ the infinitive *quezar* 'to lament',¹⁴⁶ and the substantivated infinitive *el quezar* 'the lamentation'.¹⁴⁷ *Quezar* as a transitive verb was current in the 13th century, not unusual in the 14th,¹⁴⁸ but quite infrequent from the 15th;¹⁴⁹ the complete elimination was preceded by a state of fossilization as seen in the formulaic occurrence in the Rimado de Palacio.¹⁵⁰ Reflexive *quezar* has been an ordinary word from the beginning of the literary period;¹⁵¹ it has been found in the Cantar de Mio Cid, the works of Berceo, the Libro de Alexandre, and other pre-Alphonsine monuments. The ratio of frequency between *quezar* and *quezarse* in narrative texts of the 13th century is 10 : 11; in the Confesión del Amante (ca. 1400) it changes to 0 : 18.¹⁵²

¹⁴⁵ On reflexive verbs used as intransitives, especially in non-finite forms, see H. Keniston, *The Syntax of Castilian Prose: The Sixteenth Century* 339 (Chicago University Press, 1937) *Hallome queizando* occurs in *La Vida de Lazarillo de Tormes* 161 (ed. J. Cejador y Frauca; Madrid, 1914). For older examples, see *Poema de José*, quatrain 30ab; Gonçalo Martínez de Medina, *Cancionero de Baena* 372; Canc. cast. 2.740a.

¹⁴⁶ Elena y María, lines 365-6; El Cavallero Zifar 392; Carlos Maynes, chapter 41; El Enperador Ottas, chapter 49; Villandino, Canc. de Baena 61; Canc. cast. 2.650b, 680b, 742a. Constructions like *començóse a quezar* (S. Mar. Eg., fol. 11c) are different in nature, while *fuése a quezar* (Conf. Am., fol. 30ro), *se fué quezar* (Rim. Pal., quatrain 1594d) are not clear-cut cases.

¹⁴⁷ R. Pérez de Ribera, Canc. de Baena 311: *Oyendo tal coita e quezar doloroso* 'hearing such doleful complaint and lamentation'; cf. *mi sospirar*, *su gemir*, and similar Old Spanish constructions.

¹⁴⁸ See Libro de Buen Amor, quatrains 595a, 688a; Grail Fragments, fol. 280vo; Rim. de Pal., quatrains 705a, 865b (MS N); Barlan, fol. 187ro; cf. Hist. Troyana 101 (of the late 13th cent.).

¹⁴⁹ Aguado quotes from La Celestina 76 (ed. Vigo, 1899): *quanto es dulce a los tristes quezar su pasión* 'how sweet it is to the sad to wail over their passion'. A very late example of transitive *quezar*, presumably a mere literary reminiscence, is quoted by Keniston, *Sixteenth Century Prose* 338, from the *Question de amor*. See also Canc. cast. 2.676b, 677b, 678b, 681b, 684a, 714a, 750a. Sánchez de la Ballesta (1587) offers a wide variety of translations for *quezarse* (*clamo*, *gemo*, *ingemisco*, *queror*, *conqueror*, *gemitus fit*, *deploro*, *expostulo*, *querelam vel querimoniam habeo*, *querela est*, *ingemo*), but fails to include transitive *quezar*.

¹⁵⁰ The formula is *estar quezado de penas (de cuytas, de cuydado)* 'to suffer pains, anguish'.

¹⁵¹ The documentation in the present essay has been largely limited by the end of the 15th century, because no major changes occurred after that date which could possibly help clarify the etymology of *quezar*. The two best glossaries of 17th-century Spanish, appended to B. Gracián, *El Criticón*, ed. M. Romera-Navarro (Philadelphia, 1938-40), and to F. López de Ubeda, *La Picara Justina*, ed. J. Puyol y Alonso (Madrid, 1912), respectively, fail to point out any peculiarities; material offered by glossaries to Cervantes and Gongora has been incorporated in the notes. C. Fontecha, *Glosario de voces comentadas en ediciones de textos clásicos*, was not yet available for consultation. Examples of the use of *quejarse* in refranes will be found in F. Rodríguez Marín's three collections (Madrid, 1926-34).

¹⁵² For statistical data on the frequency of MSp. *quejarse* and *queja*, see H. Keniston, *A Standard List of Spanish Words and Idioms* (Heath, 1941); the frequency and range of these two words and also of *quejido*, based on a different count, are given by M. A. Buchanan, *A Graded Spanish Word Book* (Toronto, 1927).

11. The uses of transitive *quezar* may be roughly classified as follows (with special reference to 13th-century texts):

(a) 'to attack, to pursue, to close in on, to hammer against' (as a military term, with regard to an army or an individual soldier, especially when surrounded by enemies): PCG 63b, line 47: *E quexaron los tanto que les fizieron venir a pleytesta* 'and they attacked them so viciously as to make them come to terms'; ibid. 83b, line 23: *Combater le yen et quexarle* 'they would fight against him and assail him'; currently so used in the *Historia Troyana* (Polimétrica), e.g. 9, 10, 38, 45, 70 (twice), 76, 83, 101 (twice), 106, 107.

(b) 'to urge, to prompt': HTrPol., poem No. 6, line 66: *Ca no m'devia el quezar / d'yr a huest* 'for he should not have urged me to go to the army'; PCG 117b, line 9: *Mas Gayo quexaval quel demandasse algo* 'yet G. urged him to ask something from him'; ibid. 132a, line 8: *Los cabdiellos et los cavalleros quexáronle tanto que lo ovo mal su grado a otorgar* 'the commanders and the knights urged him so insistently that he had to grant it against his own will'; ibid. 144b, line 15: *Quexó el senado de Roma mucho a Traiano ell emperador* 'the senate of Rome strongly urged Emperor T.'; cf. Gen. Est. 1.312b, line 46; 1.345a, line 24; 1.468b, line 9.

(c) 'to press' (with emphasis on impatience, hurry), GEst. 1.469a, line 47: *Pues que non vos queredes soffrir pocos días fasta que viéssemes si vinte Moysén o cómo farte, et tanto me quexades* 'since you cannot wait a few days until we see whether M. comes down, or what else he would do, and you are pressing me so much'.

(d) 'to oppress, to imperil, to torment', usually with hunger, thirst, pain, death, or a spell represented as agent: Loores, quatrain 39c: *Dolores lo cubrieron, de muerte fué quezado* 'pains racked him, as he was in throes of death'; Vida de Santo Domingo, quatrain 554c: *Quedaron los dolores que mucho lo quezaban* 'then the pains that had been torturing him subsided'; PCG 30a, line 24: *Quezados de fambre* 'suffering from hunger'; ibid. 75b, line 31: *Quexóles mucho la set* 'a terrible thirst tortured them'; ibid. 135a, line 13: *Quexándola la gran ravia de la fambre* 'as a maddening hunger was torturing her'; Grail Fragments, fol. 280vo: *El conjuramento de Josafas quel quezó asy que echó ante todos aquéllos la ymagen en medio del tenplo* 'the spell of J. which had such a grip on him that in the presence of them all he knocked down the statue in the middle of the temple'; cf. PCG 487a, line 34; GEst. 1.242a, line 13; 1.243a, line 15; 1.378b, line 4; Leomarte, Sumas 178,¹⁵³ with a person as the agent, PCG 230b, line 28.

(e) 'to chase, drive, or torture (an animal)', PCG 98a, line 12: *Un yuvero seye arando con los bueyes, et quexava los mucho; et fabló ell uno dellos et díxol: En vano me quezas* 'a peasant was ploughing with his oxen and pressing them hard; then one of them spoke up and told him: In vain art thou so hard upon me'; ibid. 102a, line 44.

(f) 'to strain', PCG 122b, line 51: *E en el logar de los iuegos numqua fazié ninguna cosa a menos de seer y el maestro de las voces quel castigasse cuémo fiziesse et que non quexasse mucho las venas* 'and in the place where the games took place

¹⁵³ Alex. O, quatrain 836d: *El ardor del sol la queza fieramente* 'the heat of the sun tortures her relentlessly' may easily contain *aquezar* rather than *quezar*; cf. Alex. P, quatrain 864d: *la aqueza*.

he never did anything unless his music teacher was present there who could explain to him how he should act so as not to strain his veins'.

Central to all significations is beyond any doubt the idea of pressing or squeezing; this is a fact to be reckoned with in the reconstruction of the etymology. How easily military terms were apt to develop figurative senses, especially in verbs referring to violent or hasty actions, has been known since the appearance of a study on *arrebatar*,¹⁵⁴ and similar potentialities were recently shown in verbs dealing with the hunting and taming of animals.¹⁵⁵ The connotation of 'urging, prompting' certainly is secondary, and that of 'impatient pressing' even tertiary (with a shift of meaning comparable to the one undergone by OSp. *priesa* 'pressure' > 'hurry, haste').¹⁵⁶ Of special interest is the frequent occurrence of transitive *quezar* in certain literary genres and authors and its absence from other, contemporary writings (cf. its scarceness in epics written in the *cuaderna vía*). This indicates a need for refinement in our methods of dating; in the Middle Ages, a given genre had its own peculiar lexicon, and, say around 1260, a word may have been acceptable in chronicles but obsolete in 'elegant' epics of non-traditional stock;¹⁵⁷ whether it was used colloquially, is in most cases a matter of speculation. These circumstances must also be taken into account in attacking an intricate etymological problem.

12. The reflexive variety of *quezar* can be dealt with summarily, because it has largely survived into the modern language and is also less likely to represent the original function of the word.¹⁵⁸ In Old Spanish the emphasis was placed on the outward manifestation of discontent (vociferation, gesticulation, down-hearted appearance), whereas nowadays the interest centers around the motivation of the dissatisfaction and unrest. In other words, OSp. *quezarse* meant mainly (not exclusively¹⁵⁹) 'to cry, to weep, to wail, to sob', whereas its modern counterpart signifies pre-eminently 'to complain'. In view of its connotation the ancient verb was usually not followed by any complement,¹⁶⁰ except for an

¹⁵⁴ J. Oliver Asín, *Origen árabe de rebato, arrobda y sus homónimos: contribución al estudio de la historia medieval de la táctica militar y de su léxico peninsular*, BRAE 15.347-95, 496-542.

¹⁵⁵ See PhilQ 23.297-306, and MLQ 6.149-60.

¹⁵⁶ A *priesa* 'fast' was not unknown to Old Spanish, cf. Alex. O, quatrain 1046b, and P, quatrain 1074b, but the prevailing meaning was that of 'hand-to-hand fight, mêlée'.

¹⁵⁷ See Old French *soutif* 'Solitary', MLQ 3.621-46.

¹⁵⁸ See Dicc. Aut. 5.463 for illustration from Lope de Vega, Arcadia; J. de Valdivielso, El Sagrario de Toledo (1616); D. de Saavedra Fajardo, Empresas políticas (1640). Dicc. Enc. quotes F. M. Samaniego (1745-1801); Pagés 4.649 cites M. de Jovellanos and J. de Letamendi. C. de las Casas (1570) translates 'querelarsi, ramaricarsi, rimbrottarsi, risentirsi', and Franciosini lists the expression *quezarse de vicio* 'lamentarsi di gamba sana (come si dice), cioè dolersi senza causa'.

¹⁵⁹ On the juridical sense of *quezarse* as used in the Fuero Juzgo, see the examples collected by Fernández Llera (notice the interesting graphs *queyssar*, *queysar*, reminiscent of Berceo); cf. Canc. de Baena 522: *E desto te quezas e tomas por y a mi por jues* 'and of this you are complaining and taking me as a judge therefor'.

¹⁶⁰ Cantar de Mio Cid, lines 852, 3207; Loores, quatrain 70d; Milg., quatrain 583c; Apolonio, quatrain 161b; Alex. O, quatrains 113b, 741b, 800a (with correspondences in P); Alex. P, quatrains 473c, 1316a; Cal. 58; HTrPol. 127 and poems No. 1, line 148, and No. 7, line 81; Flor. fil., fol. 35vo; PCG 413a, line 40; 420b, line 42; 458b, line 15; GEst. 1.332a, line

occasional qualification of the intensity (*mucho, tanto, gravemiente, quanto podierdes*),¹⁶¹ of the outward effect,¹⁶² or of a special circumstance attendant upon the lamentation.¹⁶³ The motive of the complaint, if indicated at all, was linked to the verb mostly by means of *por* (followed by a substantive or an infinitive¹⁶⁴) or a clause introduced by *porque*,¹⁶⁵ less frequently by *que*,¹⁶⁶ yet *sobre*,¹⁶⁷ *con*,¹⁶⁸ and *de*¹⁶⁹ were likewise applicable, and the latter became customary in the 15th century, preceding the name of the person credited with calling forth the grief or else the circumstance to which this effect was attributed.¹⁷⁰ *Quexarse por* 'to yearn' was used as late as Góngora.¹⁷¹ *Quexarse* linked directly with an infinitive is unusual; one example has been discovered in Guevara.¹⁷² The person who witnessed the outburst or to whom the complaint was directed was introduced by means of either *a*¹⁷³ or *contra*.¹⁷⁴ As parallelism is a stylistic device characteristic of medieval literary languages, redundant constructions may be used to determine the semantic shadings of a given word.¹⁷⁵ In our case, the combinations *quexarse e dar grandes voces*,¹⁷⁶ *quexarse e dar querellas*,¹⁷⁷ *quexarse e*

24; 1.372a, line 18; 1.374b, line 22; Cav. Zifar 16, 230, 323, 392, 456; Cav. del Cisne 97; LBA, quatrains 1416d, 1470a; PAlfOnc., quatrains 36b, 1107a, 1871b; SMarEg., fol. 12d; RimPal., quatrains 412a, 677c; ConfAm., fols. 50ro, 51ro, 71ro, 125vo, etc.; CBAena 621.

¹⁶¹ Duelo, quatrain 29b; Alex. P., quatrain 1316a; HTrPol. 17; PCG 192a, line 42; 341a, line 4, 420a, line 26; GEst. 1.305a, line 51; 753b, line 28; LBA, quatrains 792a, 887a; Enp. Ottas, chapter 41.

¹⁶² S. Mill., quatrain 163b; GEst. 1.209b, line 2; ConfAm., fol. 64ro.

¹⁶³ Milg., quatrain 242c; Cav. Zifar 14; El Corbacho 285.

¹⁶⁴ Apol., quatrain 341c; HTrPol., poem No. 4, lines 12, 47; GEst. 1.177a, line 18; 234b, line 25; 281b, line 30; 392a, line 3; 756b, line 18; Cav. Zifar 335; Grail Fr., fol. 260ro; ConfAm., fol. 236vo.

¹⁶⁵ GEst. 1.234b, line 25; 392a, line 3; PAlfOnc., quatrain 2411b; ConfAm., fol. 133ro. Notice also the construction *quexarse porende* PCG 341a, line 4, and F. Manuel de Lando, Canc. de Baena 575.

¹⁶⁶ Barlan, fol. 102vo (var.).

¹⁶⁷ GEst. 1.754a, line 9.

¹⁶⁸ Flores de Filosofía, fols. 28ro, 34vo.

¹⁶⁹ Apol., quatrain 236a; GEst. 1.209b, line 2; Cal. 2, 20; HTrPol. 116 and poem No. 5, line 81; LBA, quatrain 387d; Leom. 140, 176, 183; PAlfOnc., quatrains 103a, 2307a; Enp. Ottas, chapter 17; CastD., fol. 101vo.

¹⁷⁰ ConfAm., fol. 208ro; Villasandino, Canc. de Baena 34; J. A. de Baena, *ibid.* 473; El Corbacho 122, 134, 297.

¹⁷¹ For an (incorrectly interpreted) example, see B. Alemany y Selfa, *Vocabulario de las obras de don Luis de Góngora y Argote s.v.*

¹⁷² See Keniston, *Sixteenth Century Prose* 505.

¹⁷³ Cav. Zifar 14; Crescentia, chapter 19; Enp. Ottas, chapter 44; ConfAm., fol. 398ro; El Corbacho 79.

¹⁷⁴ GEst. 1.281b, line 30; ConfAm., fol. 312ro; Sátira 83, 84. Notice the implication of 'reproaching, murmuring, rebelling'.

¹⁷⁵ The entire Old Spanish literature is permeated with expressions like *cueyta e pesar*, *queza e afán*, *el cuydar e la tristeza*, and the like. On *duelos y quebrantos*, see A. Morel-Fatio, BH 17.59-61, and M. Goyri de Menendez Pidal, RFE 2.33-40.

¹⁷⁶ GEst. 1.76b, line 31; Villasandino, Canc. de Baena 155.

¹⁷⁷ Sátira 54.

querellarse,¹⁷⁸ *estar muy cuytado e quexarse*,¹⁷⁹ *quexarse e gemir (gerner)*,¹⁸⁰ *quexarse e llorar*,¹⁸¹ *quexarse e entrar en bolliço*,¹⁸² *quexarse e dolerse*,¹⁸³ *aver alguna cosa por mal e quexarse*¹⁸⁴ clearly delimit the range of meanings of the ancient verb.

The subject of the construction was normally a human being, but advocates of the *coaxãre* theory can point out that sometimes it was a bird (e.g. a falcon or a nightingale).¹⁸⁵ More noteworthy is the combination *el corazón se me quexa*¹⁸⁶ (and its variant *he or tengo el corazón quexado*¹⁸⁷) 'it breaks my heart', because it presumably perpetuates the oldest use of *quexarse* and provides a bridge between the transitive and the reflexive varieties of the verb. Similar constructions are: *el corazón me quiebra*,¹⁸⁸ *el corazón quiebra conmigo*;¹⁸⁹ *quebrantar corações*,¹⁹⁰ *quebrántase el corazón*,¹⁹¹ *corazón quebrantado*;¹⁹² *quebrantado* also means 'miserable, wretched' (like *quezado*)¹⁹³ and *quebranto* in the sense of 'ruin, misery, woe, grief' is definitely reminiscent of *quexo*.¹⁹⁴

13. Various nouns have been developed from *quejar*. Among these *quecido*¹⁹⁵ and *quezada*,¹⁹⁶ both signifying 'complaint', figure prominently in the language of the Golden Age, but appear absent from the older texts. Because of the productivity of *-ido* and *-adura*, there is no reason to doubt that they were coined at a late date, well within the literary period. Their synonym *quezamiento*

¹⁷⁸ GEst. 1.392a, line 8; *Sátira de fel. e inf. vida* 74.

¹⁷⁹ El Cavallero del Cisne 330.

¹⁸⁰ Prim. Crón. Gen. 96b, line 40.

¹⁸¹ Prim. Crón. Gen. 192a, line 42; Gen. Est. 1.302b, line 5.

¹⁸² Gen. Est. 1.756b, line 18.

¹⁸³ El Corbacho 176.

¹⁸⁴ Confesión del Amante, fol. 54vo.

¹⁸⁵ J. Manuel, *El Libro de la Caza* 62; H. R. Lang, *Cancioneiro Gallego-Castelhana* (Yale Univ. Press, 1902).

¹⁸⁶ La Dança de la Muerte, strophe 18, line 7.

¹⁸⁷ Grail Fragments, fol. 267ro.

¹⁸⁸ See Alex. O, quatrain 624b (P 652b); Alex. P, quatrain 1215c; HTrPol. 142; cf. OPtg. *quebrar corações* Dom Rodrigo 169.

¹⁸⁹ PAlfOnc., quatrain 1880b.

¹⁹⁰ Cav. Zifar 435, line 21.

¹⁹¹ Leomarte, Sumas de Historia Troyana 177.

¹⁹² HTrPol., poem No. 2, lines 111-2.

¹⁹³ Alex. P, quatrains 1284d, 1307c; Cav. Zifar 27, 107, 183.

¹⁹⁴ On the various shadings of *quebranto*, see Alex. O, quatrains 378b (P 386b), 519b (P 531b), 843b (P 871b); Alex. P, quatrain 1412b; HTrPol. 125 and poems No. 1, line 119; No. 2, line 61; No. 3, line 20; No. 6, line 74; Leom. 174, 177; Cav. Zifar 114; PAlfOnc., quatrains 863c, 1876c, 1865b, 2008c; LMis., quatrains 104d, 232b. The figurative use of *quebrantar* appears in HTrPol., poem No. 2, line 74; Leom. 119; Cav. Zifar 392; PAlfOnc., quatrain 895c; LMis., quatrains 40a, 179c.

¹⁹⁵ *Quecido* appears patterned after *gemido* 'sigh', current in the courtly lyrics of the 15th century. The word is listed in Oudin² (1616), Franciosini (1636): 'querela, lamento, rammarico', La Porte (1659), Sobrino² (1721), Pineda (1740). Pagés 4.649 quotes the word from Malón de Chaide (1588), and Dice. Aut. from A. Pérez, Cartas (1598), and from La Pícarra Justina (1605). To find out whether *quejivo*, *quejijo* are genuine variants or ghost-words, we must await a critical edition of the works of Lucas Fernández.

¹⁹⁶ Vittori (1606) 'lamentamento, dolenza', Oudin¹ (1607) 'plainte, complainte, doléance', Le grand dict. de trois langues (1640) 'plaincte et complaincte', La Porte (1659) 'beclanginghe'.

has been discovered only in a few texts.¹⁹⁷ Of far greater interest are *quezo*, *queza*, and *quexumbre*, because they have been objects of exchange and loan between the ancient peninsular dialects. *Quexura* belongs to a more recent stratum and illustrates a peculiar development of the suffix *-ura* in Castilian. *Quexedad* is quite unusual,¹⁹⁸ while *quexedumbre*, *quexadumbre*¹⁹⁹ may be mere errors of a copyist.

14. *Quezo* and *queza*, largely interchangeable as shown by *variae lectiones* of the same document,²⁰⁰ followed by and large a similar course, experiencing a significant extension of meaning in the course of the 14th century;²⁰¹ *quezo* was from the outset the far less common variant.²⁰² Whether the feminine variant originally had an augmentative-collective-iterative connotation (as in *riso* vs. *risa* 'laughter'), we do not know.²⁰³

Quezo can be documented from the older literature in the following significations, recalling corresponding meanings of transitive *quexar*: 'military pressure';²⁰⁴ 'peril, torture' (of hunger, thirst, sickness), 'ailment';²⁰⁵ 'predicament';²⁰⁶ 'emergency, unforeseen situation';²⁰⁷ 'affliction, grief'.²⁰⁸ An offshoot of the latter branch is the meaning 'agony, anguish of heart, pangs' in the language of the

¹⁹⁷ Libro de Buen Amor, quatrain 887b. However, *pan de quexamiento* is found in an old Bible translation; see Biblia medieval romanceada (Buenos Aires, 1927), Deuter. 16.3, 31.17.

¹⁹⁸ Alex. O, quatrain 1153d: *ovieron ende todos grant quexedat* 'everybody was grieved by this' (?); P 1182d has *mortandad* instead. Yet I find another example of *quexedat*, with the meaning of 'predicament', in Vida de San Ildefonso, BAE 57.330a.

¹⁹⁹ Flores de Filosofía, fol. 36v: *Porende la cobdicia traxe abaxamiento presente e quexedumbre e laserio con verguença* 'therefore greed immediately entails debasement, misery, and wretchedness with shame'; variant readings include *quexadumbre* and *queza durable*.

²⁰⁰ PCG 134b, line 36; LBA, quatrain 855b; Barlan, fol. 104ro.

²⁰¹ The older dictionaries do not list *quezo*, except Pineda (1740), who claims that the word is used in cant for 'lashes, whipping'; the connection with *Osp. quezo* 'torture' is obvious. On *queja*, see Dicc. Aut. for illustration from N. Recopilación, Lope de Vega, J. Martínez de Jáuregui (1583-1641), and A. de Salas Barbadillo; Dicc. Enc. quotes Samaniego and Mir y Noguera offers documentation from A. de Guevara; F. Aguado, Perfecto religioso (1629); P. de Rivadeneira (1527-1611), B. L. de Argensola (1562-1631), A. de Solís (1610-1686), F. de Moncada (1586-1635), Fr. M. de Melo (1608-1666), Baren (1527-1591), Fr. L. de León, and A. de Salas Barbadillo. Bilingual dictionaries liken *queja* to 'querella' (Nebrja, 1492); 'querella, ramaricamento, ramarichio, ramarico, rimbrotto' (C. de las Casas, 1570); 'incusatio, expostulatio, quaestus, querela, querimonia, lamentatio, angustia' (Sánchez de la Ballesta, 1587); 'lamento, querela, rammarico' (Franciosini, 1636). The latter also discusses constructions like *formar quezas de uno*, *dar queza*, *bazarse de la queza*; *romper en quejas* is illustrated in Cejador y Frauca, Fraseología o estilística castellana s.v. (Madrid, 1921-5).

²⁰² In the texts studied by Singleton the ratio is 8 : 39.

²⁰³ W. v. Wartburg, Substantifs féminins avec valeur augmentative, BDC 9.51-5, makes no reference to postverbal nouns.

²⁰⁴ PCG 228a, line 18; HTrPol. 36, 37, 38.

²⁰⁵ PCG 134b, line 36; 184a, line 2; El Libro de la Caza 8 (see VMC). Cf. El libro de los caballos, fol. 7 vo.

²⁰⁶ PCG 193a, line 25; 221a, line 12; HTrPol. 148.

²⁰⁷ PCG 137b, line 10.

²⁰⁸ PCG 130b, line 54; HTrPol. 59; Leom. 183; ConfAm., fols. 76vo, 125vo, 131ro; Crónica de don Pero Niño and Juan del Encina (VMC).

cancioneros,²⁰⁹ while the expression *con (grand) quexo* 'reluctantly' is peculiar to Alphonsine style.²¹⁰ Only from Juan Ruiz and with increasing frequency throughout the 15th century does the second basic meaning of 'complaint' develop.²¹¹

The semantic development of *queza* arrested the attention of Menéndez Pidal when he studied the manuscript tradition of the *Crónicas Generales*.²¹² In the older literature the word also reflects the uses of transitive *quezar*, meaning '(military) pressure';²¹³ 'torture, physical pain, peril';²¹⁴ 'predicament, tribulation';²¹⁵ 'affliction, grief, trouble';²¹⁶ 'desire' (a shift in meaning recalling Engl. *anxious, anxiety*);²¹⁷ 'rancor, grudge'.²¹⁸ At a late date again the secondary meaning of 'complaint' crystallizes.²¹⁹ *Queza* 'love's pain',²²⁰ 'moaning of a lover'²²¹ became a conventional literary expression coincident with the rising prestige of the Galician-Portuguese lyrical school.²²² The stylistic device of parallelism again yields a clue to the semantic shadings of both *quezo* and *queza*.²²³

²⁰⁹ For instance, Canc. cast. 2.700a (Fr. Gauberte); 738b, 742a, 746b (D. López de Haro), and *passim*.

²¹⁰ PCG 130b, line 54; 201b, line 47.

²¹¹ LBA, quatrain 792b; ConfAm., fols. 47ro, 350vo, 356vo; Villasandino, CBAena 150, 160; J. deMena, Canc. cast. 1.155b, 215a; R. Cota and J. del Encina (VMC). Canc. de Urrea 53, 431; Juan de Flores, ed. B. Matulka, p. 406.

²¹² On *tener en grand queza* 'to press hard on' see *La Leyenda de los Infantes de Lara* 231, 272, 445 (Madrid, 1896; there are no additions in the ed. of 1934). 'Los manuscritos del siglo XIV ya tenían por anticuada esta palabra que sustituyeron por *coyta*'.

²¹³ PCG 764a, line 5.

²¹⁴ In reference to thirst: PCG 75b, line 33; 76b, line 29; GEst. 1.386a, line 40; in reference to hunger: PCG 537b, line 28; GEst. 1.225b, line 15; 268b, line 24; in reference to general lack of food supplies: PCG 487a, line 39; GEst. 1.659b, line 12; in reference to a wound: PCG 517a, line 32; 518b, line 9 (compare CavEsc., fol. 13c: *la queza del corazón* to 'the bleeding heart'); in reference to death: PCG 75b, line 44; GEst. 1.31a, line 26.

²¹⁵ S. Oria, quatrain 136a; Fern. Gonz., quatrain 367b; PCG 64b, line 47; 77a, line 30; 338b, line 28; 390b, line 21; 404b, line 36; 659a, line 46; GEst. 1.18b, line 17; 92b, line 24; 154a, line 46; 224b, line 42; 242a, line 29; 372a, line 16; 372b, line 8; C. Luc., see Ford, OSP. Read. 55, line 28; ConfAm., fol. 199ro.

²¹⁶ Apol., quatrains 341d, 483c; Alex. P., quatrains 29b, 30a, 626a (cf. O 599a); PCG 555a, line 45; 555b, line 23; 614a, line 41; GEst. 1.475a, line 25; HTrPol. 127 and poem No. 2, line 61; RimPal., quatrains 190a, 271b, 413a, 746d, 780b, 783b, 870d, 895c, 1087a, etc.

²¹⁷ PCG 314a, line 16; 349a, line 28; RimPal., quatrain 157c.

²¹⁸ PCG 551b, line 7; LBA, quatrain 855b; RimPal., quatrains 281b, 348b, 379c, 1031d.

²¹⁹ RimPal., quatrains 782c, 1332a; ConfAm., fol. 125vo; Pérez de Guzmán, CBAena 611; Villasandino, CBAena 179; R. Páez de Ribera, CBAena 331, 332; Fr. Alfonso de la Monja, CBAena 239.

²²⁰ For a very early instance, in reference to the love of Potiphar's wife for Joseph, see GEst. 1.214a, line 40. Furthermore, LBA, quatrains 211d, 639d, 662a, 703c, 839d; Canc. cast. 2.698a (Fr. Gauberte), 749b (Alonso de Cardona), and *passim*.

²²¹ F. Sánchez Calavera, CBAena 599; D. Martínez de Medina, CBAena 368; Canc. cast. 2.681b (Puerto Carrero), 743b (López de Haro), 756a (Alonso de Cardona), and *passim*.

²²² H. R. Lang, *Cancioneiro Galego-Castelhano: The Extant Galician Poems of the Galego-Castilian Lyric School (1350-1450)*, glossary, shows that *queixa*, *queixar-se*, *queixoso*, and *queixura* were used by poets like A. Álvarez de Villasandino, G. Ferrández de Gerena, P. de Quiñones, A. Montoro.

²²³ *Queza* beside *priessa*: PCG 248a, line 27; GEst. 1.145b, line 33. *Queza* beside *dolor*: PCG 555a, line 45. *Queza* beside *duelo*: Cav. del Cisne 399; *Queza* beside *cueyta*: GEst. 1.360a, line 55.

The turning point in the development of both words is the demonstrably late attraction of two original offshoots of transitive *quexar* 'to press, to squeeze', by reflexive *quexarse* 'to complain'. Postverbal nouns normally reflect the semantic shifts of the corresponding verbs, but with a certain delay. This delay contributes notably to the clarification of our main problem: the relative chronology of the two branches of *quexar*, with widely divergent meanings. The fact that the (retarded) nouns, well within the literary period, register 'pressure' as the original connotation makes it highly probable that in the system of the underlying verb, stabilized in the pre-literary period, the sense of 'pressing' was fundamental.²²⁴

15. *Quexura*, apparently absent from the oldest poetry and from Alphonsine prose, is found in some 14th- and 15th-century writers, including Juan Ruiz,²²⁵ Fr. Diego de Valencia,²²⁶ J. A. de Baena,²²⁷ and A. de Palencia,²²⁸ in a variety of meanings ('hardship, anxiety, insistence'). The formation was listed by Nebrija²²⁹ and P. de Alcalá, also by subsequent lexicographers as late as the middle of the 17th century,²³⁰ but was later specified as obsolete.²³¹ *Quexura* was presumably coined from *quexa* in imitation of *priessa*: *pressura*, used promiscuously e.g. in the *Libro de Alexandre*; cf. MPtg. *apressar-se* beside MSP. *apresurarse* 'to hasten'.²³² *Quexura* reflects the variety of the suffix *-ura* which was not interchangeable with *-or*;²³³ this variety, peculiar to Castilian, sprang up at a late date.²³⁴

²²⁴ The dictionaries list a number of diminutives of *queja* and *quejido*. Terreros (1786-93) translates *el amor crece con las quejillas* 'levibus rixis amor augecit'. The derivative *quexilloso* 'querulous' is encountered in Fr. J. de Pineda (1589), see Rodríguez Marín, *Dos mil quinientas voces s.v.* Its counterpart *quejicoso*, stemming from *quejica*, occurs in the *Epistolas* of J. E. de Nieremberg (1595-1658), see Dicc. Aut. 5.463.

²²⁵ LBA, quatrains 365a, 594a, 605d, 652a, 659d, 675d.

²²⁶ Cancionero de Baena 648.

²²⁷ Ibid. 477: *La sentençia / Que me demandades con mucha quezura* 'the verdict which you are asking from me so insistently'.

²²⁸ Dos tratados 1.59.

²²⁹ 'Instantia, festinatio, properantia, properatio'. See also *Glosarios latino-españoles*, ed. A. Castro, T718: *festinatio* 'quexura'.

²³⁰ Vittori (1606) 'prestezza, sollicitudine, e lamento'; Oudin¹ (1607) 'haste, hastiveté, plainte'; Percival-Minsheu² (1623) 'haste, instance, earnestness'; Franciosi (1636) 'vocabolo poco usato, vale fretta e istanza'; La Porte (1659) 'haestighe; clachte'.

²³¹ Dicc. Aut. (1726-39): 'no tiene uso'; Cormon (1776): 'n'est point usité'.

²³² Compare *priessa* as used Alex. O, quatrains 982a (P 1010a), 1049c (P 1077c), 1196c (P 1336c), 1236c (P 1377c), HTrPol. 83, PAlfOnc., quatrain 351d, with *pressura* as used Alex. O, quatrains 500b (P 512b), 974c (P 1002c), 1202a (P 1342a), 1215c (P 1356c), also much later, e.g. by J. Tallante, Canc. cast. 2.659a. Cf. *bramura* 'groan', LBA, quatrains 100d, 633a, 1091b.

²³³ Notice the contrast between *bravura* 'wildness', *cordura* 'prudence', *hermosura* 'beauty', *tristura* 'sadness', on the one hand, and *amargor*, *-ura* 'bitterness', *anchura*, *-ura* 'width', *calor*, *-ura* 'warmth', *dulçor*, *-ura* 'sweetness', *frior*, *-ura* 'coldness', *largor*, *-ura* 'breadth', *verdor*, *-ura* 'greenness', on the other hand.

²³⁴ *-ura* alternating with *-or* represents a Pan-Romanic type; invariable *-ura* is a Castilian innovation, the individual formations having in all likelihood been derived in imitation of strong participles related by meaning (thus, *locura* follows *travesura*, *hermosura* follows *hechura*, and so forth).

16. *Quejumbre* is infrequent in the older language and not documented prior to the Vida de San Ildefonso (early 14th century).²³⁵ By way of contrast, *quezume* occurs in the Old Leonese Libro de Alexandre,²³⁶ and *queixume* was currently used in Old Portuguese. Discovery of *que(i)xume* in Old Leonese fueros²³⁷ and charters,²³⁸ also in the Sayagués dialect as used by early dramatic writers,²³⁹ the comparative isolation of *quejumbre* with regard to other Spanish derivatives in *-umbre*²⁴⁰ contrasting with the visible connection of *queixume* with Portuguese words like *azedume* 'sourness', *ciume(s)* 'jealousy', *negrume* 'somber weather'—all tend to prove that the Spanish word has been imported from the West, with a subsequent adaptation of suffixes.²⁴¹ That words suggestive of emotional reactions should have been absorbed by Castilians from Galician-Portuguese on quite a considerable scale becomes increasingly clear with the progress of Hispanic dialectology and is justifiable on cultural grounds; compare cases like *echar (de) menos* 'to miss', *soledad* 'solitude, nostalgia', *pendencia* 'grief, quarrel', *cariño* 'tenderness, affection', *coita* beside *cuita* 'grief' and *coitado* 'miserable, wretched'.²⁴² *Quejumbre*, antiquated in the 18th century, occurs occasionally in poetry;²⁴³ it has been survived by *quejumbroso*, *quejumbrosico*, and *quejumbrosidad*.²⁴⁴

²³⁵ J. M. Aguado quotes an example from the (notoriously inadequate) edition by F. Janer in BAE 51 (p. 323b).

²³⁶ Alex. O, quatrain 61d: *todas tus quezumes* 'all thy complaints' (notice the gender). There is no equivalent in MS P.

²³⁷ Fuero de Zamora §83 in Fueros leoneses, ed. F. de Onís and A. Castro (Madrid, 1916).

²³⁸ E. Staaff, L'ancien dialecte léonais, No. 101, line 7 (1294).

²³⁹ Lucas Fernández, Élogos 60.

²⁴⁰ For a survey of the development of *-men* in Latin, see M. Leumann in Stolz-Schmalz, Lateinische Grammatik² 242 (München, 1926): *-men* is an archaic suffix, no longer productive in literary Latin, with numerous formations traceable to IE etyma, frequently linked to the stem without any intervening vowel (*ag-men*, *car-men*, *cul-men*, *seg-men*), largely supplanted by the variant form *-mentum*. For the survival of *-āmen*, *-īmen*, *-īmen*, *-ūmen*, see Rom. Gr. 2.484-8; more complete lists of reflexes will be found in REW² §§31a, 115, 128, 242, 328, 358, 389, 1138, 1504, 2122, 3191, 3248a, 3427, 3574, 4845, 4972, 4998, 5022, 5030, 5123, 5407, 5456, 6005, 6372, 6499, 6817a, 9436. On Sp. *-umbre*, *-edumbre* and its connection with *-ūmine* and *-itūdine*, see Alemany Bolufer, Tratado de la formación de palabras 128 (cf. also 13-5 and 81-2); Hanssen, Gramática histórica 137-8. On *-tūdine* outside of Spanish, see Rom. Gr. 2.538-9. On the secondary *-mn-* cluster in Old Leonese, see Staaff 244-7; on *legūmine* > *legunde*, see G. Sachs, El Libro de los Caballos 135 (Madrid, 1936); on dialectal traces of *forāmen* and *lōrāmen*, see D. Alonso, RFE 27.30-4. Vacillation in gender is shown by *lumbre* (Alex. O, quatrain 956d vs P 984d) and *e(n)xambre* (Alex. O, quatrain 747b vs P 774b and fragment B). A list of Old Spanish formations in *-(d)umbre* is included in UCPL 1.208. On *-āmen*, *-īmen*, *-ūmen* in Gallo-Romance, see Gamillscheg, Bibl. dell' 'Arch. Rom.' 2.2.48.

²⁴¹ On the development of *-ūmen* in Portuguese, see Leite de Vasconcelos, RL 2.368; C. Michaëlis de Vasconcelos, RL 3.165-6 and 13.314; J. H. D. Allen Jr., Portuguese Word Formation with Suffixes 67-8 (Language Diss. 33; Baltimore, 1941). On *vime* < *vīmine* see RL 3.186; on OGal. *freame* 'cold', *frume* 'river', see Rübencamp s.v.; on various Old Portuguese formations, see RL 3.135, 140-2, 165-7; 13.314, 331.

²⁴² The derivation of *echar menos* from *achar menos*, upheld by C. Michaëlis, Cuervo, and Castro, still holds true in spite of Spitzer's dissenting view, RFE 24.27-30. On *pendencia*, see Three Spanish-Portuguese Etymologies, RR 35.307-23.

²⁴³ *Quejumbre* is labeled as obsolete by Dicc. Aut., where it is documented from the Crónica General [of Ocampo, 1543] and by Terreros. But the Colombian poet A. Silva (late

17. Among adjectival, participial, and related derivatives from the *quezar* stem, *quezante* 'plaintiff' was extremely rare,²⁴⁵ while *quezador* 'complainant' is repeatedly recorded in dictionaries of the 17th and even the early 18th century.²⁴⁶ *Quezado* 'angry, irritated, unhappy' had a vogue especially in the older period, before the rise of *quexoso*.²⁴⁷ It could be linked to a following noun or pronoun by means of *de*, *por*, *sobre*, or *contra*.²⁴⁸ Among the writers showing a marked predilection for this word is the Chancellor López de Ayala.²⁴⁹ *Quexoso* 'querulous, scolding, complaining' was rare in the 13th century,²⁵⁰ but increasingly frequent in the following two hundred years.²⁵¹ It is easiest to class it as developed from the nouns *quexo*, *quexa*, but it may be a derivative from the verb on the analogy of certain synonyms.²⁵² Occasionally, through attraction by

19th century) wrote: *Misterio de aquellas quejumbres que pueblan el aire*. An interesting occurrence in Old Spanish in Biblia med. rom., Deuter. 28.53.

²⁴⁴ *Quejumbroso* (called 'voz de poco uso' by the Dicc. Aut.) occurs in F. de Amaya, *Desengaños de los bienes humanos* (1681), see Dicc. Aut.; Jovellanos and E. Blasco (1844-1903), see Pagés 4.649; and A. de Ovalle, *Histórica relación del Reino de Chile* (1646), see P. Pineda. G. M. Vergara Martín, *Diccion. hispanoam. de voces sinónimas y análogas* (Madrid, 1930), paraphrases it by means of 'pelilloso, vidrioso, caviloso, melindroso'. The modern poet Mesa wrote: *El quejumbroso balido de una oveja*. *Quejumbrosico* is documented from E. Pardo Bazán by Pagés 4.649, and *quejumbrosidad* from Fernán Caballero by R. Barcia.

²⁴⁵ See Gómez Manrique, Canc. cast. 1.118b. Gassner, who knows of synonymous *querellante*, fails to quote it. Much more common was *pesante* 'grieved': Alex. O, quatrains 603a (P 630a), 1248a (P 1389a); Calila e Dimna 61; Leomarte, Sumas 183.

²⁴⁶ See Vittori (1606), Oudin¹ (1607), La Porte (1659), Howell (1660), Sobrino⁴ (1721), Pineda (1740).

²⁴⁷ Loores, quatrain 36b; Milagros, quatrain 226c; Alex. O, quatrains 139c (P 138c has *quezoso*), 158b (*aquezado*, but P 164b has *quezado*); HTrPol., poem No. 7, line 86; PCG 749b, line 27; GEst. 1.524b, line 50; Barlan, fol. 104ro; LMis., quatrain 234d.

²⁴⁸ *De*: PCG 542b, line 50; 749a, line 29. *Porque* clause: PCG 221a, line 27. *Sobre*: GEst. 1.601a, line 22. *Contra*: D. Martínez de Medina, CBAena 359.

²⁴⁹ RimPal. N, quatrains 152d, 296c, 478b, 494c, 729a, 749a, 802a, 868d; E, quatrains 695a, 1108b, 1141a, 1579a, 1613b, 1649b. Variant readings include *aquezado*, *achacado*, *penado*. In 596c, 678c the word stands for 'resentful, bitter, peevish' (Zeitlin).

²⁵⁰ Alex. O, quatrain 138b (P 136b) *quexoso corazón* 'grieving heart'; Calila 59: *Estovo muy triste et muy rrepentido e quexoso mucho* 'he was very sad, regretful, and downhearted'; in Flores de Fil., fol. 30ro the sense is already 'rash'.

²⁵¹ Libro de la Caza 8; Leom. 183; CavEsc., fol. 13c; Zifar 231 ('insistent'), 319 ('unbalanced'), 473; LBA, quatrains 786a, 852c, 854c; RimPal., quatrains 379d, 442a; ConfAm., fols. 36ro, 125ro, 129ro, 131vo, 411ro; Villasandino, CBAena 20; Pérez de Guzmán, CBAena (Puerto Carrero), 710b (L. de Bivero), 730b (H. de Ludueña), and passim; La Celestina 292, 363, 376; Canc. de Urrea 79, 235, 263, 342; Torres Naharro, ed. J. E. Gillet, 1.159. 169, 220; cf. also Glosarios latino-españoles E444: *aginator* 'mercador quexoso'.

²⁵² This is suggested by the state of affairs in Old Portuguese. Pertinent formations in Old Spanish include: *congozoso* (Canc. cast. 2.679b, 736a, 745b), *cuydoso* (Calila 32, 60, 63, 69), *enojoso* (CavEsc., fol. 10d), *lloroso* (Leom. 88, 89, 177), *manzelloso* (Leom. 74, 89, 146, 188), *penoso* (Canc. cast. 2.742b), *querelloso* (Cav. Zifar 284, 285, 289, 378), *renzilloso* (Cast-Dotr., fol. 101vo, Canc. cast. 2.708b, 729a), *sannoso* (Calila 66, Leom. 186). In a similar way, *quezado* was supported by *afanado* (Canc. cast. 2.662b), *amanzellado* (Cal. 93), *coytado* (HTrPol. 51, 76) beside *cuytado* (Cal. 47; HTrPol., poem No. 8, line 73; CavEsc., fol. 18b; Cav. Zifar 86; Palfonc., quatrain 813ab), *lazarado* (Cal. 47, 71; CavEsc., fol. 10d) beside *lazerado* (Canc. cast. 2.758b, 759b), *querellado* (Alex. P, quatrain 164c).

(a) *queixar* 'to press', it meant 'rash, thoughtless';²⁵³ when substantivized, it meant 'plaintiff'.²⁵⁴

18. The material so far presented probably suffices to demonstrate the correctness of the theory that *que(i)xar* 'to oppress, to squeeze' is related to *que(i)xo* 'jaw'. The normal semantic shift in Latin and Romance words expressing 'predicament' or 'complaint' is from the material to the figurative connotation: witness *plangō* 'to strike (oneself)', subsequently 'to complain'; and archaic *flīgō* 'to hit', *flīctus* 'stroke', underlying *afflīgō*, *afflīctō*. *Angō* 'to choke, to crush' preceded *angustia*, *anxia*, *anxiētās*, *anxītūdō*; *stringō* 'to squeeze, to press' paved the way for Fr. *détresse*.²⁵⁵ Within the Old Spanish domain we may adduce the case of *angostura*, *estrecho*, *estrechura* 'hardship'.²⁵⁶ *Apretar* 'to press', lit. 'to press against the chest' < *appectorāre* is of especial interest because of the graphic description and the localization, in terms of anatomy, of the process of squeezing, just as in the case of *queixar*, here interpreted as 'to crush between the jaws'.²⁵⁷ A systematic study of the synonyms of *queixar* would doubtless provide further parallels.²⁵⁸

²⁵³ On confusion between 'violence' and 'suddenness', see D. Alonso, RFE 27.44, in reference to Ptg. *de sotaque* 'all of a sudden'.

²⁵⁴ For an example from Cervantes, see R. Menéndez Pidal, *Antología de prosistas españoles* 266. *Queroso* is illustrated in the Dicc. Aut. from Lope de Vega, *Arcadia* (1595); in Mir y Noguera from A. de Solís, P. de Sandoval (1553-1620), and J. E. de Nieremberg; in Pagés from *La Gran Conquista de Ultramar* ('delicado, sensible') and from Calderón ('el que tiene quejas de otro'). The following renditions are of interest: Nebrija (1492) 'querellosus'; Oudin¹ (1607) 'plaintif, complainant, douloureux, hastif'; Percival-Minsheu² (1623) 'complaining, given to quarrel or complaint'; Diet. de trois langues (1640) 'complaignant'; Franciosini (1636) 'lamentevole, che si rammarica e duole'; La Porte (1659) 'clae-gachachtigh'; Sobrino³ (1721) *está quejoso de usted* 'il est mécontent de vous'. *Quejostísimo* is found in Sandoval (Dicc. Aut.).

²⁵⁵ My authority for Latin is Ernout-Meillet, *Dict. étym.*²

²⁵⁶ For the figurative use of *angostura*, see Calila 12, 13, 14, 20, 94; Canc. cast. 2.695b, 696b (Fr. Gauberte); for 'narrowness' suggestive of 'hardship', see HT Pol. 103. *Angustia* was well-known in Old Spanish (Barlan, fols. 107ro, 152vo, 156vo; ConfAm., fol. 309vo; Canc. cast. 2.650b (Sánchez de Badajoz), 666b (J. Tallante), 697b (Fr. Gauberte), 744b (López de Haro), 754a (A. de Cardona), 760a (Vizconde de Altamira), side by side with vernacular *congoxa* (ConfAm., fol. 353vo, Canc. cast. 2.677a, 680b, 697a, 734b, 744a), extracted from *congozar* (Canc. cast. 2.646b) < **co-angustiāre*. In the 13th century *anxia* (Alex. O, quatrain 1101c - P 1129c), later *ansias* (Canc. cast. 2.653a, 714a, 741b, 758b) prevails. For substantivated *estrecho* 'predicament' see LMis., quatrain 246a, and G. Sánchez de Badajoz, Canc. cast. 2.651a. More common was *estrechura* in the older period: Alex. O, quatrains 974a, 1102d (cf. P 1002a, 1130d), Calila 13, Leomarte 85.

²⁵⁷ Notice the semantic development of *aprieto* 'pressure' > 'hardship'. *Apretar* (los dientes, las gargantas, la ferida, la llaga) was frequent in Old Spanish: HTrPol. 41, 47, 91, 104; Barlan, fol. 164ro; Leomarte 116; Crescentia, chapter 34; Ottas, chapter 24; C. Maynes, chapters 3, 25, 39; see also Dicc. Hist. The original meaning is transparent in Leom. 118: *Apretándolo que lo tovo con los pechos entre los braços* 'pressing him between his arms against his chest'. For *apretamiento de dientes* 'gnashing one's teeth' see Barlan, fols. 120vo, 123ro, 168vo. On Judeo-Spanish *apretar* 'to oppress, to threaten', see MPhil. 1.208.

²⁵⁸ Only a hint can be made here at the resources available to the speaker of Old Spanish to express the ideas inherent in *queixar* and its cognates: *acoytar* (Alex. O, quatrain 1139a; Calila 60; HTrPol., poems No. 2, line 68, and No. 8, line 96), cf. *acuytado* (PalfOne. quatrain 445c); *afinciar* (CavEsc., fol. 11a; Zifar 205; Barlan, fol. 182vo; Crescentia, chapter 33), cf. *afincamiento* 'insistence' (CavEsc., fol. 11a; SCat., fol. 15b); *afligir* (also *aflegir*, *afrigir*):

However, the facts thus far stated do not yet permit us to express an opinion on the circumstances attending the genesis of the Hispanic verb. In what corner of the peninsula did it originate? What is the approximate date of its coinage? Through what channels was it transmitted? In order to give an answer, however tentative, to these questions, we must collect additional evidence from the study of the other branches.

IV. THE *aquexar* BRANCH IN OLD SPANISH

19. The growth of *aquexar* largely parallels that of *quexar*, except that throughout the Old Spanish period it was used much more commonly as a transitive than as a reflexive verb;²⁵⁹ no case of its occurrence as an intransitive verb seems to be on record. At the bottom of the individual significations is again the idea of 'pressing'.²⁶⁰ In reference to warfare the word signified 'to close in on, to press hard upon, to hammer (the enemy)'.²⁶¹ With the rise of a conventional style in courtly lyrics, the lady, likened to a foe, was pictured by means of *aquexar* as tormenting her lover.²⁶² Also, *aquexar* served to picture the oppression of

Zifar 244, Barlan, fol. 184vo; *apremiar* (Leom. 145; Zifar 53; Barlan, fols. 95vo, 98vo); *apremir*, -er (Alex. O, quatrains 1237c, 1310d; Grail Fr., fol. 271vo); *cuytar* 'to pursue' (HTrPol. 107, PAlfOnc., quatrain 2376b) beside *cuytarse* 'to hasten' (Alex. P, quatrain 1414b); *dar querella* (Leom. 105, 107, 175); *enzecar* 'to oppress' (HTrPol. 201; on this Arabic stem see Pietsch, MPh 13.636, Grail Fragments vol. 1, pp. xxxiii-iv, and REW³ §7792a); *fazer su duelo* (*grand duelo*) 'to wail' (Alex. P, quatrains 871c, 1235b; HTrPol. 9, 24, 76; Leom. 89); *fazer lazarar* 'to torture' (Alex. O, quatrain 1272b and P 1413b); *fazer (grandes) llantos* 'to lament' (HTrPol. 52, 100, 116, 127; Leom. 106, 149); *fazer rabias* 'to rave' (Leom. 106), *lagrimar* 'to weep' (LMis., quatrain 11a), *llorar*, *plañirse*, *querellar* beside *querellarse*, *rancurarse* 'to complain' (Alex. O, quatrains 518b, 1250b and P 530b, 1391b).

Synonyms of *queza*, *quezo*, *quexura*, and *quexumbre* include: *adversidad* (Leom. 63, 176; ConfAm., fol. 207vo); *afan* (HTrPol. 33, 51, 65, 122; CavEsc., fol. 1b; Leom. 192, 199; Canc. cast. 2.661a, 687b, 705a), *çoçobra* (Canc. cast. 2.685a, 738b); *cuydado* 'worry, grief' (HTrPol. 43 and poems No. 6, line 44 and No. 7, line 10; CavEsc., fol. 2a; Canc. cast. 2.647b, 664b, 674b, 744a, 752b, 760b) beside *el cuydar* (Calila 61) < *cōgilāre*, but presumably affected in its semantic development by *cuyta* (more frequent than *coyta*, *cueyta*) 'grief', cf. Alex. O, quatrains 232b, 843a, 1256d; Calila 7, 46; HTrPol. 10, 26, 27, 34, 49, 89, 97; Leom. 103, 192; Zifar 90; *duelo* (HTrPol. 97; PAlfOnc., quatrain 878b); *enzeco* (*enzelco*, *enseco*, *eixeco*): PCG 327a, line 25; HTrPol. 75, 98, 148; Juan Manuel, BAE 51.274; *lazeria* and *lazerio* (passim); *ma(n)zi(e)lla* (Alex. O, quatrain 45c; FnGonz., quatrain 600; Leom. 102, 157, 165, 175, 187; LBA, quatrain 244; PAlfOnc., quatrain 528; RimPal., quatrain 34); *ocasión* (Cal. 95); *pena*, *pesar*, *querella*, *rancura*, *tormento*, *trabajo*, *tribulación* (passim).

²⁵⁹ On the prefixation of *a-* (which, to some extent, may have favored the transitive use of an Old Spanish verb) a study by Eva Salomonski was in preparation at the Univ. of Zurich at the outbreak of the war.

²⁶⁰ I cannot class *aquexar* as found in Ein spanisches Steinbuch 26 (ed. K. Vollmöller; Heilbronn, 1880), a text not available to me.

²⁶¹ PCG 71a, line 34; 84a, line 10; 234a, line 34; 362b, line 10; 399a, line 15; 431a, line 10; 480a, line 29; 662b, line 21; 743a, line 34; 751b, line 12; 757b, line 27; 766a, line 47; Leom. 200; Dicc. Hist. quotes La Gran Conquista de Ultramar and Aguado gives a passage from López de Ayala's chronicles.

²⁶² El Corbacho 7; CBAena 436; Canc. cast. 2.669a.

slaves.²⁶³ Secondary senses include 'molesting, annoying, reproaching'²⁶⁴ and 'urging, prompting'.²⁶⁵

In all the cases so far indicated, both the agent and the object acted upon are persons. From this norm there are several deviations. The rarer patterns include: *aquezar una cavalgadura* 'to drive on a horse',²⁶⁶ *aquezar el venado* 'to hunt game',²⁶⁷ *aquezar bestias* 'to chase wild animals',²⁶⁸ *el perro aqueza al omne* 'the dog attacks the man' and *la tigre aqueza al cordero* 'the tiger chases the lamb'.²⁶⁹ In the following set of types, incident especially to Alphonsine style, the emphasis is on 'torturing' rather than on 'pursuing': *el sol aqueza* 'the sun scorches',²⁷⁰ *el dolor aqueza* 'the pain aches',²⁷¹ *la enfermedad aqueza* 'sickness wears down',²⁷² *la fanbre aqueza* 'hunger pinches',²⁷³ *la set aqueza* 'thirst tortures',²⁷⁴ *la guerra aqueza* 'war ruins'.²⁷⁵ Further ramifications, with love, desire, fear, and sleep acting as stimulants, are not common in the oldest language and can thus hardly be of any help in reconstructing the etymon.²⁷⁶ Equally late is the combination *aquezar su camino (su viaje)* 'to hasten one's steps'.²⁷⁷ The status of *aquezar* has been marginal since the 16th century.²⁷⁸

²⁶³ GEst. 1.346a, line 36.

²⁶⁴ D. de Cañizares, *Los Siete Sabios* 39; *Sátira* 68.

²⁶⁵ PCG 533b, line 33; Barlan, fol. 187ro (var.); Cav. Zifar 132; *Vida e Costumbres* 375; *La Celestina*, act 2, is quoted by the *Dicc. Hist. Glosarios latino-españoles*, Tol. 1823: 'ac[el]ero', Tol. 1678: 'festino', Tol. 1707 and Esc. 2871: 'propero'.

²⁶⁶ Aguado quotes the *Libro de los Enxemplos* por a.b.c. 131; for an implicit reference to this use, see LBA, quatrain 390c.

²⁶⁷ For a quotation from *Amadis de Gaula*, see the *Dicc. Hist.*

²⁶⁸ For the usage of H. del Pulgar, see the *Dicc. Hist.*; cf. *Correas* 61 and the quotations from *La Celestina* and *Los Baños de Argel* supplied by Spitzer in his etymological note.

²⁶⁹ Documentation from *La Celestina*, act 12, and from Guillén de Castro, respectively, is supplied by the *Dicc. Hist.*

²⁷⁰ Alex. P, quatrain 882d; PCG 54a, line 41.

²⁷¹ HTrPol., poem No. 2, line 63; LMis., quatrain 46c; *Sátira* 85; Canc. cast. 2.715b (L. de Bivero), 756ab (A. de Cardona), and passim.

²⁷² PCG 541a, line 2; 717b, line 41; GEst. 1.762a, line 3; Cav. Zifar 243; for an example from Mariana, see the *Dicc. Hist.*

²⁷³ PCG 684a, line 38; 706b, line 23; 746a, line 28; Juan Manuel, see the *Dicc. Hist.*; LMis., quatrain 105c; Barlan, fol. 205ro; D. de Cañizares, *Los Siete Sabios* 34. The related construction *uno aqueza a otro con fanbre* is found PCG 234a, line 34.

²⁷⁴ PCG 76a, line 7; GEst. 1.656b, line 48; CBAena 254 (M. Fr. Imperial); D. de Cañizares 34. For the related construction *uno aqueza a otro con set*, see PCG 54a, line 41; 74b, line 53.

²⁷⁵ PCG 733a, line 55.

²⁷⁶ Oldest example showing the transition to the figurative sense is PCG 717b, line 9. The further development is illustrated with: *el amor e deseo aqueza* (LBA, quatrain 662b); *el amor aqueza* (El Corbacho 7); *la solititud aqueza* (A. de Palencia, *Dos tratados* 2.13); *el cuidado aqueza* (ConfAm., fol. 220vo); *la rrason aqueza* (Fr. Lope de Monte, CBAena 356); *las palabras aquezan* (*Sátira* 84); *el suenno aqueza* (L. de los Enx. por a.b.c., quoted by Aguado).

²⁷⁷ Documentation from Marqués de Santillana, Rodríguez de la Cámara, and Díaz de Toledo in the *Dicc. Hist.*; add Palencia, *Dos tratados* 2.58 and *La Celestina* 76 (Vigo, 1899).

²⁷⁸ The *Dicc. Hist.* offers examples from Ángeles, Moratín, and Zorrilla; the *Dicc. Aut.* provides attestation from Cervantes and Mariana; the *Dicc. Enc.* cites the *Romancero del Cid* and Luis de León; Pagés quotes Fernando de Rojas and Luis de León; the *Dicc. de la RAcEsp.*³ (1770) offers additional documentation from *Las Partidas*, Juan de Mena (1411-

The reflexive variety, of which Singleton failed to find a trace in two of the longest Alphonsine texts, signified either 'to mourn, to grieve' (thus in the *Cantar de Mio Cid* and in *Berceo*),²⁷⁹ or else 'to hurry' (thus preeminently in 14th- and 15th-century monuments).²⁸⁰

20. A number of derivatives from *aquezar* have been recorded. *Aquezado* is found at an early date for 'sorrowful, downhearted';²⁸¹ subsequently the word appears with the indubitably secondary meaning 'hasty';²⁸² only occasionally does it assume the sense 'torturing'.²⁸³ The corresponding adverb *aquezadamente* 'hurriedly, impetuously' has not been encountered prior to the 15th century.²⁸⁴ Even more distinctly late and of artificial coinage is *aquezador* 'torturing'.²⁸⁵ The postverbal noun *aquejo* 'affliction' was used sporadically in Renaissance literature,²⁸⁶ while the much older derivative *aquezamiento*, standing originally for 'oppression',²⁸⁷ was subsequently exposed to the influence of the increasingly numerous connotations of the underlying verb, hence it came to mean 'anxiety, affliction, violence, haste'.²⁸⁸ *Aqueja* and *aquejadura*, listed in

1456), the *Crónica del Rey D. Juan II*, and M. Molinos (1628-1696). In classical usage the subject of the verb is hardly ever a person, but rather a word like *esperanza*, *temor*, *pensamiento*, *dolor*, *cuidado*, *voluntad*, also *hambre* (as late as Cervantes). Nebrija: 'propero, festino; maturo; stimulo'; Las Casas (1570): 'affrettare'; Vittori (1606) 'sollicitare, spingere'; Oudin¹ (1607) 'haster, presser'; Percival-Minsheu² (1623): 'to hasten, to make speed, to make haste, to urge forward'; Franciosini (1636): 'addolorare, affligere, tormentare'; La Porte (1659) '(sich) haesten'.

²⁷⁹ *Cantar*, line 1174: *Mal se aquezan los de Valencia que non sabent qués far* 'sorely grieved are the people of V., for they don't know what to do'; Loores, quatrain 14b; Santa Oria, quatrain 17b. For a late example, see ConfAm., fol. 389ro. See also Zifar 323, line 12 var.

²⁸⁰ Examples from *Amadís de Gaula* and Rodríguez de la Cámara in the *Dicc. Hist. Add Vida e Costumbres* 27, El Cav. del Cisne 195. Franciosini (1636): 'affrettarsi, affaticarsi'; Oudin¹: 'se haster, aller vite, s'avancer'.

²⁸¹ FnGonz., quatrain 76a; GEst. 1.380b, line 14; HTrPol. 26; Villasandino, CBAena 109; Sátira 101; A. de Cardona, Canc. cast. 2.753a.

²⁸² As early as Alex. P, quatrain 1309c; cf. Leom. 158; Diego de Valera, Epístolas 16.

²⁸³ Sátira 98: *Egrotaban de calentura muy aquezada* 'they were suffering from torturing fever'. The older dictionaries illustrate the use of *aquezado* from Juan de Mena (*Dicc. RAcEsp.*³ [1770]) and Luis de Granada, *Dicc. Aut.* 1.365. Characteristic translations are: Nebrija: *aquezada cosa* 'maturus'; Vittori: 'sollicito, presto, veloce, ratto'; Oudin¹: (cosa) 'hastif, meür, avancé'; (hombre) 'hasté, pressé'; Percival-Minsheu²: 'hastened'; La Porte: 'haestigh, das haestigh ryp is'.

²⁸⁴ Quotations from Enrique de Villena, Juan de Mena, and Rodríguez de la Cámara in the *Dicc. Hist.*; add A. de Palencia, *Dos tratados* 1.47. Nebrija: 'properanter, properatim, festinanter; mature'; Vittori: 'sollicitamente, frettolosamente, prestamente'; Oudin¹: 'hastivement, promptement, meurement'; Percival-Minsheu²: 'hastily, speedily, quickly, nimbly, with expedition'; La Porte: 'haestelycken, rypelycken'. Labelled as antiquated throughout the 18th century. Relatively early is the occurrence in *Glosarios*, Esc. 98, 142, 195, 283.

²⁸⁵ For two examples from Ercilla, see the *Dicc. Hist.*

²⁸⁶ The *Dicc. Hist.* quotes Fr. A. Álvarez, *Silva espiritual*, ed. 1596. A quite isolated instance in Old Spanish is Alex. O, quatrain 1216d.

²⁸⁷ Apol., quatrain 131b; PCG 770b, line 14; GEst. 1.346a, line 46; C. Luc. 50; Cav. Cisne 318; GrCultr., see the *Dicc. Hist.* Also in aljamiado texts; see Yúçuf, B (ed. Schmitz), quatrain 244d.

²⁸⁸ To the illustration provided by the *Dicc. Hist.* (Villena, *Arte Cisoria*; translation of the Aristotelian *Ethics* by the Conde de Viana; *Crónica de D. Juan Segundo*) add Leomarte 96; Sátira 70.

dictionaries, failed to occur in the texts subjected to analysis.²⁸⁹ *Aquexoso* came into existence even later than *quexoso*, that is to say, somewhere during the 15th century,²⁹⁰ because of the wide range of meanings of transitive and reflexive (a)*quexar* at that late date, it is small wonder that the adjective should display a multitude of shadings ('sorrowful, plaintive, lamenting, torturing, speedy').²⁹¹ The equally late adverb *aquexosamente* shares this feature of vagueness; it stands for 'violently, anxiously'²⁹² and 'hurriedly'.²⁹³ By the 18th century at the latest, these two formations had become obsolete.²⁹⁴

V. THE (ar)*requexar* BRANCH IN OLD SPANISH

21. This is to all appearances an old branch, with a sizeable set of formations in the 13th century, but only vestigial reflexes after 1300. As a consequence it was almost unknown to the ancient lexicographers.²⁹⁵ This archaic character makes the branch an important piece of evidence: certain uses tending to obscure the basic meaning of the stem failed to develop in this word group, as they did in those previously described.

In the *Primera Crónica General*, *requexar* refers once to the oppression of a tribe by a king,²⁹⁶ and twice to the hardships endured by a besieged army;²⁹⁷ *requexamiento* serves as the corresponding noun.²⁹⁸ In Old Spanish there is also *requexo*, dissociated (arbitrarily, in our opinion) from the rest of the *quex-* family by Menéndez Pidal, Bertoldi, and Singleton, though not by García de Diego and Spitzer.²⁹⁹ In toponymy *requexo* seems to signify 'slope, ravine'.³⁰⁰ In

²⁸⁹ The Academy Dictionary lists *aqueja* 'queja'; *aquejadura* is given by J. Caballero⁶ (1882).

²⁹⁰ The oldest occurrences recorded in the *Dicc. Hist.* are from early-16th-century texts (*Cancionero de Encina*, *Gordonio*). These are antedated by *Glosarios latino-españoles*, T 1569: *subitus* 'cosa aquexosa'.

²⁹¹ For passages from Pineda, *Vida de S. Juan Baptista* and *Agricultura Cristiana* (ed. 1589); Fr. B. Pacheco, *Sobre el Pater Noster* (ed. 1594), and Arredondo, *Castillo inexpugnable*, see the *Dicc. Hist.*

²⁹² Díaz de Toledo, Rodríguez de la Cámara, and F. Villalobos (*ibid.*). *Glosarios*, Esc. 386: 'vehementer'.

²⁹³ D. de Cañizares 32, 40: *ir, venir muy aquexosamente* 'to go, to come very hurriedly'. *Glosarios*, Esc. 84: 'ciciter' (i.e. cito); Esc. 259: 'ocius'.

²⁹⁴ Thus they are not listed in the dictionary of Fr. Francisco Cañes (1787), Terreros 1786-93) calls them 'de poco uso', Cormon (1776) comments: 'peu usité'.

²⁹⁵ *Requejamiento*, *requejar* emerge from oblivion in the dictionaries of Cormon and Terreros. The glossary of Sánchez, which may have been instrumental in spreading knowledge of the existence of this branch, is not available to me for consultation.

²⁹⁶ PCG 211a, line 45.

²⁹⁷ PCG 104a, line 35; 198b, line 30.

²⁹⁸ See Singleton, *op.cit.*

²⁹⁹ See *Orígenes del español* 93-5: *Villa Kexida* (1154, Eslonza), *Requexolo* (1105, Sahagún), *Rekessolo* (1084, Sahagún), *Rekesciolo* (1068, Burgos). Add *carrera de Rrequeyzo* from E. Staaff, *L'ancien dialecte léonais d'après les chartes du XIII^e siècle* (Upsala, 1906), No. 88, line 6 (A.D. 1247). Caballeros quotes the PN *Quejana* in Álava; Pagés 4.648 lists *Queixa* in Orense; Pineda knows of *Quexa*, a cape on the coast of Asturias. Bertoldi thinks of a pre-Latin *rekk-* stem; see *Fonema basco-guascón attestato da Plinio AR 15.400-10*, especially 407. For the correct classification (based on modern dialectal, not on ancient literary forms), see García de Diego, *Contribución* 43, and Spitzer, *AR 15.596*.

reference to the sea it means 'straits'.³⁰¹ Speaking of a fortress, chroniclers appear to have used it for 'ditch, rampart'.³⁰² Krüger has observed that in toponymy *requexo* is restricted to the northern (Cantabrian-Pyrenaic) zone.³⁰³ This fact must interest the etymologist, because most toponymic patterns traceable to a pre-Latin substratum are scattered over the entire territory of the peninsula, with special areas of concentration in the North.³⁰⁴ Thus the geographic distribution of *requexo*, if this word be linked to *quexar*, would favor the view of a comparatively late spread of the stem, say between the 8th and the 10th centuries, when there was no real center like Toledo under the Visigoths, but instead a number of smaller focal points all along the Northern line of resistance against the Moors.

22. Somewhat less scantily represented is the *arrequexar* sub-branch.³⁰⁵ The use of this verb for 'to squeeze in (between the sea and some rocks, or between the mountain range and a ravine)' is interesting;³⁰⁶ this meaning should be remembered in evaluating the suggested etymology. Normally *arrequexar* was employed in describing oppression,³⁰⁷ military pressure,³⁰⁸ and, with striking consistency, the beleaguering of an enemy,³⁰⁹ emphasis being placed on crushing the resistance by cutting off a fortress and starving it into surrender.³¹⁰ This calls to mind operations called by modern tacticians 'pincer movements', 'nutcracker', and the like; notice the prevailing idea of 'crushing between two sharp edges', justifying the etymology here advocated. *Un omne arrequexado* is tantamount to 'a man in a state of predicament, in a plight';³¹¹ the (rather unusual) construction *ser arrequexado de fazer alguna cosa* comes close to 'being obliged to do something',³¹² and *arrequexamiento* signifies either 'plight, misery' in general³¹³ or, specifically, 'famine, thirst, starvation, cutting off from food supplies'.³¹⁴ The last example of *arrequexar* collected by the writer is from the Cavallero del

³⁰⁰ That the same word should be suggestive of 'high' and 'low' is not striking; cf. Lat. *altus*.

³⁰¹ PCG 255a, line 14.

³⁰² PCG 464b, line 7. Cf. Vida de Santa María Egipcíaca (Bibl. Hisp., 1907), line 455.

³⁰³ F. Krüger, *Die Gegenstandskultur Sanabrias und seiner Nachbargebiete* 12 (Hamburg, 1925). Extensively utilized by Bertoldi.

³⁰⁴ On these intricate and not yet fully clarified questions, see R. Menéndez Pidal, *Sobre las vocales ibéricas e y o en los nombres toponímicos*, RFE 5.225-55, and *Sobre el substrato mediterráneo occidental*, ZRPh. 59.189-206.

³⁰⁵ There is no need here to elaborate on the relation between *re-* and *arre-*, debated ever since the publication of J. Cornu, *L'a prosthétique devant rr en portugais, en espagnol et en catalan*, Rom. 11.75-9. Assumption of Iberian or Arabic influences is not necessary to account for the case under study.

³⁰⁶ GEst. 1.350b, line 9; 358a, line 54.

³⁰⁷ PCG 679a, line 15; GEst. 1.79a, line 22.

³⁰⁸ PCG 79b, line 13.

³⁰⁹ PCG 489a, line 15; 362a, line 46; 729a, line 28; 743b, line 28; 750a, line 3; 754a, line 23.

³¹⁰ PCG 546a, line 21.

³¹¹ PCG 404a, line 33.

³¹² PCG 670a, line 77.

³¹³ PCG 580a, line 15; 717b, line 16.

³¹⁴ PCG 223b, line 21; 707a, line 35; GEst. 1.375b, line 2; 378b, line 26; 556b, line 19.

Cisne, where it stands for 'cornering a game'.³¹⁵ *Arrequezamiento* is documented in the Dicc. Hist. from La Gran Conquista de Ultramar, traceable to the 14th century.³¹⁶

VI. THE *queixar* FAMILY IN OLD PORTUGUESE

23. The situation in Old Portuguese deserves attention for three reasons: (1) the literary genres best represented in ancient Portugal (love songs, hagiography) yield abundant information on word material centering around the idea of 'lamentation'; (2) the formations found in the Western and in the Central dialects are not at all identical: thus, with two different sets of reflexes at his disposal, the etymologist is more likely to succeed in reconstructing the original situation in Ibero-Romance; and (3) these initial differences between the two offshoots of the same Latinity have been blurred in the historical period. A discussion of our problem is apt to shed light on the interpenetration of the vocabularies of the two leading peninsular dialects.

In Old Portuguese we find reflexive *queyxar-se* 'to lament, to complain',³¹⁷ which, in the finite forms, may but need not be used without the reflexive pronoun.³¹⁸ It is constructed like its Spanish counterpart, except that occasionally *queixar-se a alguen* appears to mean 'to be angry at somebody', presumably in imitation of the synonymous *assanhar-se a*.³¹⁹ This use extends to *aqueyxar-se*.³²⁰ The first major divergence from Old Castilian usage is seen in the absence of transitive (a)*queyxar*, (ar)*requeyxar*. For the meaning 'to torment, to oppress, to press hard upon', speakers of Old Portuguese used a variety of other verbs.³²¹

24. The word family of *queyxar* shows considerably fewer ramifications in Old Portuguese than in Old Spanish. There is only vestigial evidence of the existence of the *requeyxar* branch; this evidence is important as a link in our reconstruction because of the absence of transitive (a)*queyxar*. In a document from Lamego (A.D. 1352) *requeyxado* stands for 'acanhado, estreito, oprimido e

³¹⁵ *Cuydando que algund venado tenían arrequezado en algún lugar* 'thinking that they had somewhere cornered a game' (3).

³¹⁶ *En tan grand arrequezamiento nunca fueron como nos agora somos* 'they have never experienced such utter misery as we do at present'.

³¹⁷ CAjuda fols. 95b, 102b, 106a, 123a, 125b, 144a, 148ab, 154b, 161a, etc.; Cant. d'amigo, Nos. 1, 2, 73, 143, 181, 195, 208, 256, etc.; Eufros. fols. 46ro, 49ro; Barlan, fol. 33ro; SAnt. 230; SBento, fol. 22; DRodrigo 153, 158; Graall fol. 47; Cr. João I 270, 278, 319; CGeral 1.55, 57, 158, 246. The verb is normally connected with *de* or *ende*, infrequently with *contra*: MPaulo, fol. 9ro; Graall, fol. 31.

³¹⁸ Cant. d'amigo, No. 504; CGeral 1.17.

³¹⁹ Ibid., No. 307. For the construction of *assanhar-se*, see CAjuda, fols. 135b, 136a; Cant. d'am. Nos. 208, 229, 237, 307, 344, 347, 349, 351, 354, 412; *assanhar-se escontra* Cant. d'am. 202.

³²⁰ Graall, fols. 11, 29, 39, 45; Canc. Geral 1.194, 409.

³²¹ These words include: *aficar* Cant. d'am., No. 303; DRodr. 148; Mar. Eg. A fol. 51ro; Barl. fol. lvo; *anojar* Barl. fol. 17ro; *apremar* Barl. fol. lro; *atormentar* ibid., fol. 11ro; *britar* ibid., fol. 7ro; *coytar* CAjuda, fols. 90b, 100b, 107b beside *cuytar* ibid. 82a and *acoytar*, Hist. de Abrev. Test. Velho in Flor. Lit. Arc. (*acoytar-se* 'to despair' Vita Christi, ibid.); *fazer nojo a* Barl, fol. 11ro; *penar* Cant. d'am., No. 66; *quebrantar*: SBento, fol. 56, Barl., fol. 20vo; *tribular* Barl., fol. 16vo.

também despovoado' (Elucidário² s.v.), a use which suggests the existence, at an earlier date, of transitive *requeyzar* comparable to OSp. (ar)*requezar*.³²² From *aqueyzar* the derivative *aqueyramento* has been recorded.³²³

Very common from the outset and found in many styles was *queysume*.³²⁴ As previously pointed out, Sp. *quejumbre* is a belated adaptation of Luso-Leonese *queysume*. On the other hand, the two current Old Castilian post-verbal nouns *quexo* and *quexa* had no equivalents in Old Portuguese. Significantly enough, *quexa* appears a few times in the Cancioneiro Geral in poems written by Portuguese authors in Spanish;³²⁵ this indicates the channel through which it was ultimately absorbed, not without being reshaped to resemble the native stem *queyzar*, another of those disguises which eluded the attention of the older school of phonologists. For 'pain, torment, hardship, lamentation', writers of Old Portuguese had a wide variety of expressions at their disposal, including *afam*,³²⁶ *choro*,³²⁷ *cuydado*,³²⁸ *coyta* beside *cuyta*,³²⁹ and similar formations, mostly known from Old Spanish.³³⁰

³²² On *requeijitos* in the Transmontano dialect see footnote 343.

³²³ Pero Menino, Livro de Falcoaria 51, line 23; var. of *queysume*. Notice, however, *adqueizato* in a preliterate document, A.D. 1048; see N. P. Sacks, *The Latinity of Dated Documents in the Portuguese Territory* 162 (Philadelphia, 1941).

³²⁴ CAjuda, lines 3147, 10065, 10077; Cantigas d'am., Nos. 58, 103, 113, 127, 159, 201, 202, 268, 288, 289, 380, 393, 453; Carta d'El-Rei D. Dinis (A.D. 1279), Elucid.² 2.171; Foral de Tomar, *ibid.*; Fabulário Português, ed. Leite de Vasconcelos, fol. 30vo; Livro de Falcoaria 51; Marco Paulo fol. 28vo; Fernão Lopes, Cron. João I 4, 7, 34, 43, 78, 79, 84, 106, 108, 109, 110, 176, 200, 237, 252, 258, 324, 325, 334, 360; Docum. A. D. 1563, ed. A. d'Azevedo, RL 15.115. The current constructions were: *aver queysume de* 'to complain of'; *fazer queysume de* 'to express one's anger at'; *perder queysume* 'to become cheerful again'. The suffix *-ume* in Old Portuguese was either masculine or feminine, as is true also of *-agem*; cf. *a mansedume* CAjuda, fols. 214b, 217b; *as chorumes* Amaro, fol. 116vo; *legumes molhados* Mar. Eg. B 187 beside *legumes molhadas* Mar. Eg. A, fol. 53ro. *Costume* was preeminently masculine: Graall, fols. 3 (three times), 19; Mar. Eg. B 188, 190, 199; DRodr. 142; SBento 91; Euf., fols. 42vo, 43ro; Barl., fols. 20ro, 20vo; CGeral 1.220, 224, 226. *Ceume(s)* 'jealousy' and *queysume* were hardly ever accompanied by a word that would permit identification of their gender.

³²⁵ E.g. in Dom Joam de Meneses (1.138), Duarte de Brito (1.381).

³²⁶ CAjuda, fols. 99b, 100a, 115a, 156b, 165b, 183a, 190b, 191b, 219a, 227a, 242b; Cant. d'Am., Nos. 7, 243; Graall, fol. 69.

³²⁷ CodAlc. 200, fol. 198ro; Amaro, fols. 116ro, 120ro; Ant. 67, 68; Graall, fol. 13; Mar. Eg. A, fol. 63vo B, 194; CGeral 1.73, 344.

³²⁸ *Coydado* Barl., fols. 2ro, 3ro. *Cuydado* CGeral 1.24, 25, 27, 29, 30, 31, 38, 39, 44, etc. *O coydar* CAjuda, fol. 97a.

³²⁹ *Coyta* CAjuda, fols. 87b (three times), 88a (twice), 88b (twice), 89b, 90a (twice), 90b (three times), 91b (twice), 92a, 92b, 98a, 99b, etc.; Cant. d'am., Nos. 1, 9, 10, 26, 44, 55, 85, 119, 129, 130, 138, etc.; Graall, fols. 1, 2, 8, 12, 13, 15, 24, 27, 52; Ant. 70; DRodr. 149; Barl., fols. 1ro, 2ro, 3ro, 10vo, 22vo, 34vo. *Cuyta* CAjuda, fols. 81b, 82a (twice), 82b, 84a, 88a (three times), 89b, 90a (three times), 91b, 93b, 96a, 97b, etc. *Coyto* Amaro, fol. 116ro. Cf. *moimento* 'tomb' (Graall, fol. 19; Barl., fol. 6ro) beside *muimento* (Graall), fol. 19.

³³⁰ Only a hint at the resources of Old Portuguese can be given here. *Afiçom* SBento fol. 36; Antioco 67, 70, 71, 75. *Cajom* 'predicament, peril' < *occâsiõe* LCons. *Despeyto* Cant. d'am., No. 126; Graall, fol. 61. *Doo* Graall, fol. 38. *Door* (de *coraçom*) Mar. Eg. A, fol. 63vo. *Fadiga* CGeral 1.373, 375. *Gemido* (gimido) Antioco 67, 68; Barl., fols. 16vo, 23ro, 28ro, 30vo; CGeral 1.10, 11, 311, 365. *Lamentaçom* Barl., fol. 33vo; CGeral

A point of special interest is the existence in Old Portuguese of *queyxoso*³³¹ and *queyxosamente*³³² in the face of the absence of **queyxo* and **queyxa*. That -oso in Latin and Romance is a nominal suffix cannot be questioned. Three explanations suggest themselves: the intermediary links **queyxo*, **queyxa* may have existed in the West prior to their disappearance in the preliterary period; *queyxoso* may have been borrowed from the East, while no need was felt for the absorption of OSp. *quexo*, *quexa* (at least, not until the 16th century); or *queyxoso* may have been, by way of exception, developed directly from the verb in imitation of such sets as *chorar* : *choro* : *choroso*; *querelar* : *querela* : *quereloso*; *coytar* : *coyta* : *coytoso*.³³³ A decision cannot easily be reached on the basis of the available material; it would seem that the last interpretation is the most plausible.

Because of the archaic character of the Old Portuguese lexicon, it is not unimportant that *queyxar-se* was by no means the standard word for 'wailing, complaining'. There existed a host of competing expressions, many of which go back to well-known Latin bases. This would favor the view (although it cannot serve as a positive proof) that *queyxar-se*, in contrast to those traditional words and combinations of words, is a comparatively recent newcomer to the semantic area under study. Synonyms of *queyxar-se* include: *braadar* and its variants,³³⁴ *carpir(-se)*,³³⁵ *chorar*,³³⁶ *fazer chanto (planto)*,³³⁷ *fazer doo (or door)*,³³⁸ *querellar-se*,³³⁹

1.339. *Lazeyra* Barl., fol. lvo; Graall, fol. 68 (cf. *lazarado* Rei Ramiro in Flor. Lit. Arc.). *Martheyro* Graall, fols. 14, 37; Cant. d'am., No. 66; Barl., fol. 15vo; CGeral 1.24, 295, 298, 360, 374. *Murmuraçom* SBento, fols. 62, 104. *Murmuramento* ibid., fol. 64. *Murmuro*, ibid., fol. 84. *Nojo* Graall, fol. 27; CGeral 1.417. *Pena* Antioco 70; CGeral 1.301, 409. *Pes(s)ar* CAjuda, fols. 89a, 92a, 92b, 94a, 94b (twice), 98b, 113a; Cant. d'am., Nos. 4, 6, 14, 54, 116, 171, 183, 245; SNic. 582; Amaro, fol. 116ro; Barl., fols. 2ro, 12vo; TrDev., fol. 150ro; DRodr. 149, 157. *Pressa* DRodr. 149; SBento, fol. 26. *Quebranto* Cant. d'am., Nos. 47, 53; SBento, fol. 55; CGeral 1.12, 29, 126, 379. *Querel(l)a* CodAlec. 200, fol. 213ro; Hist. Ger. de 1344, T. Arc. 56; CGeral 1.29, 33, 34, 270, 371, 379, 409; see also Apost. aos Dic. Port. 2.311-2. *Sospiro* CGeral 1.10, 11, 311. *Tormento* Barl., fol. 12vo. *Trabalho* Graall, fol. 27; CGeral 1.373. *Tribulaçom* Antioco 70; Barl., fol. 6vo; Amaro, fol. 114ro; SBento, fols. 26, 36; Tr. de dev., fol. 137vo. *Tristura* CGeral 1.337, 343, 344, 356, 368, 376, 410, 417, 433, 434.

³³¹ Cant. d'am., Nos. 181, 285; Barl., fol. 34ro; LFale. 41, 51; Crón. João I 325, 332; CGeral 1.372, 384, 419; cf. RL 15.112.

³³² Barl., fol. 40ro; SAnt. 204; Crón. João I 140; Flos Sanctorum, Flor. Lit. Arc. 128. The meaning is 'insistently'.

³³³ *Choroso*: Euf., fol. 46ro; Amaro, fol. 120ro; CGeral 1.362, 365. *Quereloso*: CodAlec. 200, fol. 213ro; CGeral 1.368, 397. *Coytosamente*: Euf., fol. 46ro.

³³⁴ *Braadar* Amaro, fol. 113ro, Tr. dev., fol. 138vo; Barl., fol. 25vo; Mar. Eg. A, fol. 64ro B 197. *Braadar altas vozes* Antioco 66, Mar. Eg. B 200. *Braadar alta voz* Barl., fols. 27vo, 30ro. *Dar (grandes) braados* SNic. 582; Amaro, fol. 117ro; Tr. dev., fol. 164vo.

³³⁵ DRodr. 167; CGeral 1.99, 105, 263; *carpido* 'wailing' Amaro, fol. 120ro.

³³⁶ Cant. d'am., Nos. 1, 8, 13, 68, 117, 128, 140, 142, etc.; Amaro, fols. 112vo, 113ro, 116ro, 116vo, 117ro, 117vo, 118ro, 119vo, 120ro, 121ro; Barl., fols. 7vo, 8vo, 9vo, 11ro, 24ro; Graall, fols. 1, 2, 10, 13, 15, 19, 23, 36, 53; and passim. In most of these instances *chorar* refers to the crying and wailing of men. Characteristic combinations are: *chorar mui fortemente*, *chorar mui de coração*, *chorar feramente*, *chorar doorosamente*, *chorar amargosamente*, *chorar muito dos seus olhos*.

³³⁷ SNic. 583, 586; Tr. dev., fol. 149vo; Euf., fol. 46ro; Ant. 66.

³³⁸ SNic. 583; Amaro, fols. 116ro, 116vo; Ant. 66; Graall, fols. 11, 13, 26, 27, 34, 37, 44, 47, 53, 59.

in addition to some rarer circumlocutions.³⁴⁰ Most of them are represented in other Hispanic dialects as well, and many of them are Pan-Romanic or at least extend over a vast coherent area of Romance speech.

VII. THE *quezar* FAMILY IN PENINSULAR, AMERICAN, AND JUDEO-SPANISH DIALECTS

25. The record of *que(i)xar* in the ancient literary languages may be supplemented by the evidence supplied by modern dialects.³⁴¹ In Asturias and adjacent areas the medieval *requexo* 'straits, ravine, slope' is continued by *requexá* 'poor terrain ending in a slope', listed by García Lomas, and by *requexada* 'rinconada', *requexu* 'rincón escondido', listed by Rato y Hevia. The latter is also familiar with *arrequexau* 'arrinconado, escondido', a relic of a verb extinct in standard Spanish long before 1400. *Aqueixar* and *aqueixo* are supposedly extant in Galician.³⁴² In the nearby Transmontano dialect there is *requexitos* 'mexericos, murmuraciones'; the Portuguese provincialism *queizagens* 'guelras de peixe' has presumably branched off from *queixo* in its anatomic acceptance.³⁴³ *Quejumbre* and *quejume* are both extant on Galician ground; *aquejumbarse* 'to complain' has been encountered in Cuba, while *quejambre* 'complaint' and *quejambroso* 'plaintive' (derived through suffix-change) are found in Colombia and possibly other American territories.³⁴⁴ *Quejo*, so frequent in medieval Spanish, is still used in Puerto Rico. *Queixido* has been recorded in the Northwest of the Peninsula; the same suffix (or possibly *-to* < *-īvu* as explained in LANG. 17.110) and the prefix *re-* suggestive of intensity and repetition appear in Salam. *requexito* 'deep moaning indicating sharp pain'.³⁴⁵ A facetious effect may be ascribed to *queixón* 'querulous person, croaker', extending from Western Asturias to Upper Ara-

³³⁹ *Trat. de Teol.* 38; *Ant.* 66; *CGeral* 1.436.

³⁴⁰ *Gemer* Barl., fols. 2vo, 7vo, 39ro; *Ant.* 67; *CGeral* 1.6. *Murmurar* SBento, fol. 22. *Sospirar* Mar. Eg. A, fol. 65ro, B 202; *suspírar* Barl., fol. 2vo, *Ant.* 67. *Dar grandes sospiros de coraçom* Mar. Eg. A, fol. 59vo, B 195. *Dar-se a gram coyta* Graall, fol. 38. *Esparger muytas lagrimas* Mar. Eg. A, fol. 59vo, B 195. *Ferir seus peitos* Mar. Eg. A, fol. 59vo, B 195. *Rromper per seus panos* SNic. 583. *Tirar per seus cabelos e per sas barvas*, *ibid.*

³⁴¹ Out of many dozen glossaries consulted, the following have yielded information. For Asturias, A. de Rato y Hevia, *Vocabulario de las palabras y frases bables* (Madrid, 1891); for La Montaña, G. A. García Lomas y García Lomas, *Estudio del dialecto popular montañés* (San Sebastián), and for Western Asturias, B. Acevedo y Huelves and M. Fernández y Fernández, *Vocabulario del bable de occidente* (Madrid, 1932). For Modern Galician, J. Cuveiro Piñol, *Diccionario gallego* (Barcelona, 1876) and M. Lurgis Freire, *Gramática do idioma galego* (La Coruña, 1922). For Leonese, J. de Lamano y Beneite, *El dialecto vulgar salmantino* (Salamanca, 1915). For Latin America, F. J. Santamaría, *Diccionario general de americanismos*; C. Gagini, *Diccionario de costarriqueñismos*² (San José, 1919); A. Batres Jáuregui, *Vicios del lenguaje y provincialismos de Guatemala* (Guatemala, 1892).

³⁴² Galician glossaries are notoriously inaccurate in distinguishing between the ancient and the modern language.

³⁴³ See C. de Figueiredo, *Novo Dicionário da Língua Portuguesa*³.

³⁴⁴ *Quejambre*, labeled as 'vulgar' by Santamaría, is localized by Alemany in his dictionary. Concerning the use of *quejumbre*, Gagini informs us that 'dícese de una que es muy quejumbres cuando se queja por el más leve motivo o dolor'.

³⁴⁵ In the same area *quejio* is said to stand for 'quejigo'.

gon,³⁴⁶ and to *queixudo* in the West, with *-ón* and *-udo* serving to characterize an individual by a salient feature. *Quejoso* has survived in Western Asturias; in Mexico it exists as the name of a bird ('saltator atriceps'). A presumably ancient type *quejizu*, *quejizoso*, involving the *-iceu* suffix, prevails in Eastern Asturias. *Quejita* is used in Guatemala: 'Entre niños, y aun entre adultos, se oye mucho decir *quejitas* por *quejumbroso*'.

26. Very few pertinent data have been discovered in Judeo-Spanish dialects, ancient or modern.³⁴⁷ The reason may be that in expressing emotions, Spanish Jews used in part Hebrew words (as has been shown with regard to *oinar* 'to lament' by L. Feiler Sachs³⁴⁸), in part Latin and Romance formations of very old date, in accord with their pronounced conservatism.³⁴⁹ *Quezarse* and *quexa* are recorded, and *aquezar* continues in individual dialects.³⁵⁰

VIII. THE NUCLEUS OF THE ETYMOLOGICAL PROBLEM

27. The considerable body of references so far given on the occurrence of *que(y)xar* and its congeners in various offshoots of Ibero-Romance can be organized so as to justify the proposed etymology.

(a) Transitive *quezar*, unknown to Old Portuguese, is found in 13th-century Castilian texts as a military term meaning 'to press, to hammer'. It survived for two or three more centuries in various figurative senses.

(b) Reflexive *que(i)xar*, meaning both 'weeping, wailing' and 'complaining', has existed since the Middle Ages from the Atlantic up to Aragon.

(c) The postverbal nouns *quezo* and *quexa* are characteristic of Old Castilian. They are absent from Old Portuguese, where *queixo* stands for 'jaw, chin', as does *queix* in Catalan; their Old Castilian counterpart has been overlaid by *que(x)-ada*. MPtg. *queixa* is a late Castilianism. At the outset *quezo* and *quexa* reflect the meanings of transitive *quezar*, thus suggesting its relatively high age. *Quejo* has survived in the Antilles (and in cant).

(d) *Queixume* is current in Old Portuguese and Old Leonese from the 13th century. It exhibits a use of *-ume* familiar from *azedume*, *ciume*. OSp. *quejumbre* is rare, late, and abnormal in its use of *-umbre*; it may be classed as a Lusitanism along with *pendencia*, *cariño*, *soledad*, *echar de menos*. *Quejambre* is a Spanish American variant.

³⁴⁶ See Kuhn, *Der hocharagonesische Dialekt* 46. But Tilander, *Los Fueros de Aragón* (Lund, 1937), records only *querellar* and its cognates, not *quezar*.

³⁴⁷ For the sources used, see footnote 358.

³⁴⁸ See her note on *oinar* 'endechar', RFE 23.192-3.

³⁴⁹ See the various writings of D. S. Blondheim on this subject.

³⁵⁰ Here are some of the findings: MS Esc. I-j-3, Gen. 19.15 *aquezar* 'to urge'. Prov. Mor. MS Esc., quatrains 63d, 457d: *quezarse*; 437b, 527d: *queza*; 191d: *dar voces aquezadas*; 654a: *quezoso*. Proverbs: Besso, No. 154: *quezarse*, Foulché-Delbosc, No. 395: *quejarse*, No. 756: *queja* (Nos. 324, 659: *quejada* 'mandibula'). Biblia de la Casa de Alba, Jes. 7: *aquezar la tierra* 'to oppress the land'. On *aquizar* see RH 79.452. For the use of *apretar*, see MPH. 1.208; Coplas de Yóçef, line 138. In this last poem, notice *los kuerpos kuitados*, line 44; *lyorar de los oños*, line 149; *tomar kordoños* 'to be distressed', line 150; *ir (or ser) manzilyado* 'to feel compassion for', line 162.

(e) *Que(i)xoso* was incident both to the West and to the Center; so was the corresponding adverb. The formation persists in Northern Spain. The situation in Old Portuguese, where postverbal nouns are lacking, leads to the belief that *que(i)xoso* was patterned directly on *que(i)xar* in imitation of sets like *chorar* : *choro* : *choroso*, but other explanations are possible. *Quejiz(os)o* is found in Asturias.

(f) OSp. *aquezar* 'to press upon, to hunt, to pursue' is a common transitive verb; a few instances of *aquezarse* 'to wail' are recorded. In Old Portuguese only the reflexive type exists. *Aquezar*, as a transitive verb, outlived *quezar*, both in the literary language and in dialects. Derivatives from *aque(i)xar* are mostly late and etymologically irrelevant.

(g) The ancient branch *requexar* has left scattered reflexes in Alphonsine monuments, conservative dialects, and place names all along the line of the Cantabrian Mountains. In Asturias *requex-o*, *-ada* at various points mean 'slope, ravine, corner'. In ancient texts the word stands also for 'straits'. The basic idea is 'squeezing in'. In the West we find *requeizado* (Lamego, 14th century). An equally old sub-branch with derivatives of its own and dialectal remnants, again in Asturias, is *arrequexar*.

28 On the basis of these data the following interpretation suggests itself. In contrast to *llorar*, *plañir*, *querellar-se*,³⁵¹ the word under study belongs to a comparatively recent stratum: it did not originate in the Imperial Latinity as a consequence of what Jud calls the 'nova provincialis superbia' reacting against the 'remedium Italicum',³⁵² nor is there reason to surmise that it came into

³⁵¹ *Plangere* shows a very complex development in Ibero-Romance. There exist two verbal types: *plañir*, *-er* (S. M. Eg., fol. 8d; C. Maynes, chapter 41; Ottas, chapters 24, 42, 45; Apol., quatrain 444c; Alex. P., quatrain 1217c; RimPal. N., quatrains 819a, 969c, 1465b; E, 1472a, 1477d; Bibl. Alba, Jes. 30; CBaena 41; Sátira 57, 59, Canc. cast. 2.751a), still applicable in poetical language nowadays; and *llañer* (Zifar 480, Plác., fol. 26c, Cresc., chapter 22). Accordingly, there exist two nouns, *llanto* and *planto*, but with an inverse ratio of frequency: the former occurs Zifar 45, 66, 154, 385; Leom. 106, 107, 147, 148, 162, 168, etc.; Guill., fol. 35b; Cresc., chapters 11, 29; Ottas, chapters 25, 33; Grail, fol. 253vo; Barl., fols. 132ro, 204ro; ConfAm., fols. 35vo, 47ro, 112ro, 119ro, 156ro, 378vo; Sátira 88; Canc. cast. 2.700a; the latter is used rarely, e.g. Alex. P., quatrain 1216a (not conclusive, since Aragonese); ConfAm., fols. 46vo, 67ro, 95ro, 156vo, 163vo, 184vo, 378vo; El Corbacho, see BRAE 10.172; CBaena 621; Canc. cast. 2.653a. Actually the form that has survived is *llanto*, not *planto*. The situation is even more intricate in Old Portuguese, where the three forms *chanto* (SAnt. 198; SBern., line 129), *planto* (SBern., line 145), and *pranto* (MPaulo, fol. 9ro) seem to coexist. In the East, where *pl-* was preserved, there is no such multiplicity of reflexes. It would seem that *plangere* was the traditional, vernacular verb in Ibero-Romance for 'to weep, to complain' (cf. Fr. *se plaindre*, It. *piangere*) long before *que(i)xar* had come into existence. Phonological trends led to the form **plañer*, beside **pllanto* < *planctu*. In the former case there was a sequence of two palatal groups, in the latter there was none. So there was a tendency to give preference to the regressive form *plañir* in the case of the verb and at the same time to accept the fully developed variant *llanto* in the case of the noun. Influence of Church Latin may have further complicated the case. *Plañir* was ultimately displaced through the success of *que(i)xar-se* and because of the unpopularity of all verbs terminating in *-ñir* due to their inflexional complexity. For occasional vacillation in Old Aragonese, cf. in El cuento de Tristan de Leonis, ed. Northup, *prañer* (fol. 29 vo) beside *plañer* (fols. 33 vo, 58 ro, 70 ro, 75 vo) and *planto* (fol. 81 ro).

³⁵² See J. Jud, *Problèmes lexicologiques de l'hispano-roman*, RLiR 1.181-92.

existence under the Visigoths, when military terms were largely Germanic, and when linguistic neologisms reached the entire peninsula from Toledo as the radiation center. Before the invasion of the Moors, presumably only *queixo* 'jaw' < *capsu* existed in an area extending from the Atlantic to the Mediterranean. Subsequently this area was interrupted by a central zone in which *quex-ada* evicted the older formation.

It is among the warriors of Christian Spain, between the 8th and the 10th century, that *que(i)xar* 'to press between the jaws' and subsequently 'to squeeze, to crush, to smash' must have sprung into existence. Whether *que(i)xar* or *aque(i)xar* represents the older variant can no longer be determined. *Aque(i)xar* resembles in its structure such Hispanic derivatives as *aprear*, *apretar*, *abraçar*, with bases denoting parts of the body (*pede*, *pectore*, *bracchio*). The *reque(i)xar* branch is also traceable to the first millennium and disintegrated at an early date. The connection between the new verbal derivatives and the underlying noun *que(i)xo* < *capsu* was not immediately forgotten, as is demonstrated by the reluctance of Western speakers to admit the postverbal nouns, which were freely used in the Center, after **que(i)xo* 'jaw' had been suffered to submerge in that area.

The shift from the transitive to the reflexive use must have preceded by centuries the beginning of the literary era.³⁵³ As bridges between the two branches we may single out: (1) *quexado*, combining, as similar formations do in Ibero-Romance, active and medio-passive-reflexive functions; (2) expressions like *tengo el corazón quexado*, *quexaseme el corazón*, reminiscent of English *heart-breaking*, *heartrending*, *heartbroken*; Germ. *herzzerreissend*, *herzbeklemmend*, *herzbeklommen*; Fr. *avoir le cœur serré*; Russ. *u menä serdce szimaetsä (ot boli, ot užasa)*, and similarly figurative expressions in other languages. That *querellar*, through the identity of the first syllable, may have accelerated this shift, just as, according to Gilliéron, *grossus* and *grassus* helped *grandis* to prevail over *magnus*, is readily granted;³⁵⁴ attention is also drawn to *quexdar* < *quaesitäre*, preserved in Mozarabic, which may have exercised a potent influence on the semantic development of our word, conceivably in the 11th century, when the Christians overran Toledo, merging with the Mozarabs.

29. The further development is perfectly transparent. Only one phase seems to require elaboration. Since Portuguese in so many respects is more conservative than Castilian, it is surprising that the original function of the word should have been maintained in the Center over a longer period of time than in the West. For this anomaly only a tentative explanation, transcending the limits of technical linguistic analysis, can be offered here. It appears from a study of the available Alphonsine material that transitive *quexar* and its variants are more commonly found in the second part of the *Primera Crónica General*, dealing with the history of Spain, than in the first part, concerned with Greece and Rome, or in the *General Estoria*, based on the Old Testament. We know from Menéndez Pidal that this second part of the chronicle, while written toward the end of

³⁵³ This is indeed the normal syntactic development. For cases of the reverse shift, see H. Schuchardt, ZRPh. 32.231-3 (*alapāri*, *admīrāri*).

³⁵⁴ This explanation has been endorsed by Meyer-Lübke, RLiR 1.26.

the 13th century,³⁵⁵ contains prose renderings of early epics, mostly no longer extant. That an epic tradition did exist in Castile and failed to develop in Portugal, is accepted by all students of medieval Hispanic literature. On this statement we are inclined to elaborate by adding that the epic tradition may have carried with it certain characteristic words and expressions, among them several pertaining to military operations. These words, then, counter to the general trend, were more faithfully preserved in Castile than in the peripheral dialects; witness the history of (a)*sosegar* < *subsecāre* 'to emasculate', then 'to tame, to conquer (an enemy)', finally 'to appease';³⁵⁶ perhaps *omne nado* > *nadi(e)* is also traceable to a Castilian epic tradition.³⁵⁷ Literary historians and etymologists can collaborate fruitfully in the reconstruction of this lost epic tradition, provided each group prepares its documentation independently, without premature mutual interference, and without recourse to technically dubious criteria. Only then can the results of their separate researches claim genuine scientific value.³⁵⁸

³⁵⁵ On the stratification of the chronicle, see *Discursos leídos ante la Real Academia de la Historia en la recepción de D. Ramón Menéndez Pidal* (Madrid, 1916).

³⁵⁶ See PhilQ 23.297-306.

³⁵⁷ See *Hisp. Rev.* 13.204-30.

³⁵⁸ The following OLD SPANISH sources have been used (arranged in an approximately chronological order): *Cantar de Mio Cid*, ed. R. Menéndez Pidal (Madrid, 1908-11); *El Libro de Alexandre: Texts of the Paris and the Madrid Manuscripts*, ed. R. S. Willis Jr. (Elliott Monographs 32; Princeton-Paris, 1934); *Gonzalo de Berceo, Obras*, ed. F. Janer in *Poetas castellanos anteriores al siglo XV* (BAE 57; Madrid, 1864); *idem, Vida de Santo Domingo de Silos*, ed. J. D. Fitz-Gerald (Paris, 1904); *idem, Veintitres Milagros*, ed. C. Carroll Marden (RFE Anejo 10; Madrid, 1929); *idem, Cuatro Poemas*, ed. C. Carroll Marden (RFE Anejo 9; Madrid, 1928); *El Libro de Apolonio*, ed. C. Carroll Marden (Elliott Monographs 6, 11-2; Princeton-Paris, 1917-22); *Poema de Fernán González*, ed. C. Carroll Marden (Baltimore, 1904); *Elena y María (Disputa del Clérigo y el Caballero)*, ed. R. Menéndez Pidal, RFE 1.52-96; *Razón de Amor*, ed. R. Menéndez Pidal, RH 13.602-18; *L'ancienne version espagnole de Kalila et Digna*, ed. C. G. Allen (Macon, 1906); *Alfonso el Sabio, Primera Crónica General de España*, ed. R. Menéndez Pidal (NBAE 5; Madrid, 1906); *idem, General Estoria, Primera parte*, ed. A. G. Solalinde (Madrid, 1930); *Flores de Filosofía*, ed. H. Knust, in *Dos obras didácticas y dos leyendas* 11-83 (SBE 17; Madrid, 1878); *Historia Troyana en prosa y en verso*, ed. R. Menéndez Pidal and E. Varón Vallejo (RFE Anejo 18; Madrid, 1934); *D. Juan Manuel, El Libro de la Caza*, ed. G. Baist (Halle, 1880); *idem, El Libro del Cavallero e del Escudero*, ed. S. Gräfenberg, RF 7.427-550; *idem, El Libro de los Enxemplos del Conde Lucanor et de Patronio*, ed. H. Knust and A. Birch-Hirschfeld (Leipzig, 1900); *Juan Ruiz, Libro de Buen Amor*, ed. J. Ducamin (Toulouse-Paris, 1901); *El Libro del Cavallero Zifar*, ed. C. P. Wagner (Ann Arbor, 1929); *Poema de Alfonso Onceno*, ed. F. Janer (Madrid, 1863); *Leomarte, Sumas de Historia Troyana*, ed. A. Rey (RFE Anejo 15; Madrid, 1932); *Spanish Grail Fragments*, ed. K. Pietsch (Chicago University Press, 1924-5); *La Vida de Santa Catalina and La Estoria de Santa María Egipcíaca*, ed. H. Knust, in *Geschichte der Legenden der h. Katharina von Alexandrien und der h. Maria Aegyptiaca* (Halle, 1890); *Un noble cuento del Enperador Carlos Maynes de Rroma*, ed. J. Amador de los Ríos, in *Historia crítica de la literatura española* 5.344-91 (Madrid, 1864); *El cuento muy fermoso del Enperador Ottas de Rroma*, *ibid.* 391-468; *Fermoso cuento de una saneta Enperatriz que ovo en Rroma*, ed. A. Mussafia, in *Eine altspanische Prosadarstellung der Crescentiasage*, *Sitzungsb. Wien* 53.508-62; *La Leyenda del Cavallero del Cisne*, ed. E. Mazorriaga (Madrid, 1914); *Estoria del Rrey Guillelme*, ed. H. Knust, in SBE 17.123-57; *El Libro de la Vida de Barlan e del Rrey Josapha*, ed. G. Moldenhauer, in *Die Legende von Barlaam und Josaphat auf der iberischen Halbinsel* (Halle, 1929); *Vida e Costumbres de*

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THE DRAVIDIAN VERBS 'COME' AND 'GIVE'

M. B. EMENEAU

UNIVERSITY OF CALIFORNIA

[For the general object of the paper and the main results, see §§1 and 17.]

1. In the better known South Dravidian languages, the verb system is such that two principal parts, or two stems, suffice as a basis on which the whole system may be built. The second stem is in general derivable from the first by the addition of a suffix **-i-* or a suffix containing a dental stop (sometimes disguised by morphophonemic alternations), and is the basis for the past tense alone, or, in some of the languages, for present-future and past tenses, or for other combinations of forms. On the first stem are built all the remaining positive forms and the negative forms. Vocalic alternation within the stems, either of quality or of quantity, is very rare, but in the extremely few verbs where it occurs tends to be persistent throughout the history of all the languages; e.g. the verb 'see' has stems **kaṇ-*, **kaṇt-* in Tamil, Malayalam, Kannada, Coorg, and Toda, while Kota shows variation between *kaṇ-* and *kaṇ-* in the first stem, with leveling begun but not yet completed, or perhaps completed but with the disturbing long vowel reappearing by loan from other languages of the group. Likewise, any deviation from the suffixes given above as forming the second stem is rare.

When there is deviation from this norm of two stems with vowels identical and the second stem formed from the first as stated, the verb is irregular. Of the handful of such verbs, two are the subject of this paper, namely the verb meaning 'come' and the verb paired with it in form in South Dravidian languages and variously recorded as meaning 'give' or 'bring.' A comparative study is made with the objects of setting up Proto-Dravidian forms and finding an origin for the irregularities. The study will introduce from my field-notes, most of which are still unpublished, material for Toda, Kota, Coorg, and Kolami,¹ and,

¹ This is a very small part of the material that I collected during a field-trip in 1935-8, under the auspices and with the financial aid of Yale University, the American Council of Learned Societies, and the American Philosophical Society (Penrose Fund).

The books, grammars, and dictionaries mainly used are:

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unexpectedly considering the long cultivation of the language, a new meaning for Malayalam.

The first step in the study is a complete presentation of the pertinent details for all the languages.

2. TAMIL.

(a) 'Come':

past tense *vant-*;

imperative 2sg. *va-*, 2pl. *va-r-um*;

other positive forms *var-*;

negative forms in Old Tamil *va-r-*, in New Tamil *var-*.

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J. E. Friend-Pereira, *A Grammar of the Kūi Language*, Calcutta, 1909.

F. V. P. Schulze, *A Grammar of the Kuvi Language*, Madras, 1911.

E. H. Tuttle, *Dravidian Developments*, Philadelphia, 1930 (*Language Monographs*, No. 5).

In quoting from the sources I have generally normalized the transcription slightly (of course exercising the greatest care not to misrepresent the facts), except for the initial presentation of the details of Gondi (§11).

In the transcription *r* represents the post-dental one-flap tremulant, *ɾ* the alveolar trill, and *ɽ* in Proto-Dravidian and in Tamil, Malayalam, and Old Kannada the retroflex fricative, while in Kota it is a retroflex one-flap tremulant and in Toda a retroflex trill.

In the use of the terms Proto-Dravidian, pre-Tamil, and the like, I follow the usage of L. Bloomfield, F. Edgerton, E. H. Sturtevant, and others in Indo-European studies. To quote the last-named scholar (*The Indo-Hittite Laryngeals* 12, fn. 1): 'A prefixed Proto- designates an ancestral language known only through the process of reconstruction. A prefixed pre- designates a period previous to a given language (whether known from actual documents or by reconstruction) and generally subsequent to another language (usually a reconstructed language); if a form is labelled pre-Gmc. or the like, it belongs to some linguistic stage within the designated period.'

(b) 'Give':

past tense *tant*;imperative 2sg. *ta*, 2pl. *ta-r-um*;other positive forms *tar*;negative forms in Old Tamil *ta-r-*, in New Tamil *tar-*.

Two other verbs meaning 'give' in Tamil have as roots *koṭu-* (past stem *koṭutt-*) and *i-* (past stem *i-nt-*), and are not in any way connected with the verb that we are discussing. No difference of meaning between the three verbs is given in grammars or dictionaries, nor, when I worked with a Tamil speaker from Madras City (see JAOS 59.503-5), could I find any difference in meaning between the two verbs that he knew, *koṭu-* and the one being discussed. It should be noticed, however, that he knew our verb apparently only as a literary verb; his ordinary word was *koṭu-*.

The specimens of Tamil in the LSI, however, give some evidence that looks toward a difference between these two verbs. In the Tamil translation of the parable of the prodigal son, from the Madras Auxiliary Bible Society publication of 1889, on p. 315, *ta-* is used with 1st personal indirect object (line 3), *koṭu-* with 3rd personal indirect object (lines 4, 12). This distinction, *ta-* 'give to 1st or 2nd person', *koṭu-* 'give to 3rd person', is one that we shall find in Malayalam, Kota, Toda, and Coorg, and we should expect to find it for Tamil also. Unfortunately, the case is not too clear from the evidence of this translation, since on p. 317, line 4, *koṭu-* has a 1st personal indirect object. It is as well to note here that in the examples containing these two verbs in Arden's grammar, *ta-* is very uncommon and once has a 3rd personal indirect object (182), once an implied general indirect object, which probably is 3rd personal (180). On the other hand, *koṭu-* usually has a 3rd personal indirect object, but three times has a 1st person (197, 215, 233), once a 2nd person (254). It seems clear enough that written Tamil does not make the distinction that we shall find in the other languages mentioned, or—perhaps better—does not make it consistently so far as the Bible translation goes.

The LSI classes the speech of the vagrant Koravas of the Bombay Presidency as Tamil, though it is somewhat different from the colloquial Tamil of the south. Four of the specimens given contain examples of the verbs in question. Of the five examples of *ta-*, four have 1st personal indirect objects (321, 324, 325) and one has a 2nd person (328). Of the eight examples of *koṭu-*, six have a 3rd person (321, 322, 325, 326, 327, 328), but two have the 1st person (322, 326). Again, a not quite consistent carrying through of the distinction.

The language of the vagrant Kaikāḍis in the Bombay Presidency and Berar has also been classed with Tamil. Three of the specimens have examples of our verbs. Of the five examples of *ta-*, four have 1st personal indirect objects (336, 337, 341, 342), but one has a 3rd person (336). The four examples of *koṭu-* have 3rd persons (336, 341, 342). Again, a not quite consistent carrying through of the distinction.

The language of the vagrant Burgandis of Indore is closely connected with Kaikāḍi. The two specimens given are unsatisfactory and badly recorded. They do show both verbs, *ta-* with 1st and 2nd personal indirect objects (three

TABLE 1, THE VERB **va-*

	IMPERATIVE		NEGATIVE
Tamil	<i>va</i> ; <i>va-r-um</i>	past <i>vant-</i> ; other positive forms <i>var-</i>	OT <i>va-r-</i> , NT <i>var-</i>
Malayalam	<i>va</i> ; <i>var-ika</i> ; <i>var-uvin</i>	past <i>vann-</i> ; other positive forms <i>var-</i>	OM <i>va-r-</i> , NM <i>var-</i>
Kannada	<i>ba</i> ; <i>banni</i>	past, cond. fut. <i>band-</i> ; other positive forms <i>bar-</i>	OK <i>ba-r-</i> , NK <i>bar-</i>
Coorg	<i>ba</i> ; <i>ba-ri</i>	past <i>band-</i> , <i>ba-lu</i> ; other positive forms <i>bar-</i>	<i>bar-a</i>
Kota	<i>va</i> ; <i>va-m</i>	pres.-fut., past <i>rad-</i> ; fut., vol. <i>va-</i>	<i>va-r-</i>
Toda	<i>po</i> ; <i>po-s</i>	pres.-fut., past <i>pod-</i> ; desid., dubit. <i>pa-</i> ; vol. <i>paš-</i>	<i>po-r-</i>
Telugu	<i>ra</i> (< * <i>var-</i>), <i>rammu</i> ; <i>raṇḍi/u</i>	infinitive <i>ra</i> (< * <i>var-</i>); other positive forms <i>va-</i>	<i>ra-</i> (< * <i>var-</i>)
Kolami	<i>va</i> ; <i>va-r</i>	past <i>vatt-</i> ; pres.-fut., gerunds <i>va-</i> ; future <i>var-/vad-</i>	<i>var-</i>
Brahui	<i>ba</i> , <i>bar</i> ; <i>ba-bo</i>	past <i>bass-</i> ; other positive forms <i>bar-</i>	<i>ba-</i> (< * <i>bar-</i>)
Gondi	<i>var-</i>	positive and negative <i>va-</i> (? also <i>va-</i>)	
Tulu	<i>bar-</i> throughout		
Oraon	<i>bar-</i> throughout (no negative forms)		
Malto	<i>bar-</i> throughout (analytic negative forms)		
Kui	<i>va-</i> throughout (imperative also <i>va</i>); transition suffixes: positive <i>-a-</i> , negative <i>-ara-</i> and <i>-aja-</i>		

TABLE 2, THE VERB **ta-*

	IMPERATIVE			NEGATIVE	MEANING
Tamil	<i>ta-</i> ; <i>ta-r-um</i>		past <i>tand-</i> ; other positive forms <i>tar-</i>	OT <i>ta-r-</i> , NT <i>tar-</i>	give (? give to 1st or 2nd person)
Malayalam	<i>ta-</i> , <i>tar-ika</i> , <i>lar-uwin</i>		past <i>tann-</i> ; other positive forms <i>tar-</i>	OM <i>ta-r-</i> , NM <i>tar-</i>	give to 1st or 2nd person
Kannada	<i>ta-</i> ; <i>tanni</i>		past, cond. fut. <i>tand-</i> ; other positive forms <i>tar-</i>	OK <i>ta-r-</i> , NK <i>tar-</i>	bring (Badaga 'give to 1st or 2nd person' probably < Kota and/or Toda)
Coorg	<i>ta-</i> ; <i>ta-ri</i>		past <i>tand-</i> , <i>ta-tu</i> ; other positive forms <i>tar-</i>	<i>tar-a</i>	give to 1st or 2nd person
Kota	<i>ta-</i> ; <i>ta-m</i>		pres.-fut., past <i>tad-</i> ; fut., vol. <i>ta-</i>	<i>tar-</i>	give to 1st or 2nd person
Toda	<i>to-</i> ; <i>to-s</i>		pres.-fut., past <i>tod-</i> ; desid., dubit. <i>ta-</i> ; vol. <i>taš-</i>	<i>to-r-</i>	give to 1st or 2nd person
Telugu	<i>te</i> , <i>temmu</i> , <i>te-rumu</i> ; <i>tenḍi</i> / <i>u</i> , <i>te-ranḍu</i>		infinitive <i>te</i> , <i>te-ran</i> ; other positive forms <i>te-</i>	<i>te-</i> , <i>te-ra-</i>	bring
Kolami	<i>*-la-</i> ; <i>*-la-r</i>		(no other forms)	(no other forms)	bring
Brahui	<i>-la</i> , <i>-lar</i> ; <i>-la-bo</i>		(no past); other positive forms <i>-tar-</i> (also <i>la-</i> in a few dialectal forms)	(no forms)	give
Gondi	<i>tar-</i>		positive and negative <i>lat(l)-</i> (< <i>*la-t-</i>)		bring
Tulu	<i>tar-</i> in causative form				
Oraon	(no forms)				bring
Malto	(no forms)				
Kui	<i>ta-</i> throughout; transition suffixes: positive <i>-t-a-</i> , negative <i>-t-ara-</i> and <i>-t-oja-</i>				bring

clear examples 345, 347, and two very doubtful ones 346), *koṭu-* with a 3rd person (one example 345).

It is possible then that some aberrant dialects of Tamil show a distinction in meaning: *ta-* 'give to 1st or 2nd person', *koṭu-* 'give to 3rd person'. It is even possible that the distinction is inconsistently carried through in literary Tamil as a survival, perhaps, of a thoroughgoing difference in early Tamil or in pre-Tamil. Unfortunately, lack of a specialist knowledge of Tamil and lack of Tamil books prevents my carrying the matter further. A clear statement of the facts by a specialist would be welcome.

The Malayalam evidence in the next paragraph argues also for this difference of meaning in Tamil at an early period, since Malayalam separated from Tamil in the Early Middle period of the latter language.²

3. MALAYALAM

(a) 'Come':

past tense *vann-* (< Early Middle Tamil *vant-*; the dental stop is also attested for Old Malayalam³);

imperative 2sg. *va*, *var-ika*, 2pl. *var-uvin*;

other positive forms *var-*;

negative forms in Old Malayalam *va-r-*, in New Malayalam *var-*.⁴

(b) 'Give to 1st or 2nd person':

past tense *tann-* (< Early Middle Tamil *tant-*; the dental stop is also attested for Old Malayalam³);

imperative 2sg. *ta*, *tar-ika*, 2pl. *tar-uvin*;

other positive forms *tar-*;

negative forms in Old Malayalam *ta-r-*, in New Malayalam *tar-*.⁵

The specific meaning given for this verb was got from a Malayalam-speaking informant, and is not recorded in grammars or dictionary accessible to me.⁶

'Give to 3rd person': *koṭu-* (past stem *koṭutt-*).

4. KANNADA.

(a) 'Come':

past tense and contingent future *band-*;

imperative 2sg. *ba*, 2pl. *banni*;⁷

other positive forms *bar-*;

negative forms *ba-r-*, also *bar-* in Middle and New Kannada.⁸

² See most recently and best, L. V. Ramaswami Ayyar, *The Evolution of Malayalam Morphology*.

³ Op.cit. 54 bottom, 64.

⁴ Op.cit. 58, lines 2 and 3; 95, line 10; etc.

⁵ Op.cit. 57, line 2; 94 middle; etc.

⁶ Work on the Malayalam language was done at Yale University in 1934-5; my thanks are due to this institution for making it possible. The informant was a Syrian Christian from Travancore State.

⁷ Of the various other forms given by Kittel 152-3, 2sg. *ba-r*, *ba-ra*, *ba-ru* are based analogically on the negative stem, since in regular verbs the imperative 2sg. is the first stem with zero-suffix, *-a*, or *-u*, and the first stem is that found in negative forms (§1). 2pl. *barri* is found only in New Kannada and is probably analogically formed. 2pl. *banni* (and the related forms, for which see Kittel) has suffix *-i*; Kittel explains the nasal as analogically derived from the past stem *band-*, and no better explanation suggests itself.

⁸ Op.cit. 107. This verb in the oldest records shows forms with initial *v-*. Initial *v-* generally was replaced by *b-* beginning from the 9th century; Narasimha 52-5.

(b) 'Bring':

past tense and contingent future *tand-*;

imperative 2sg. *ta'*, 2pl. *tanni*;

other positive forms *tar-*;

negative forms *ta'r-*, also *tar-* in Middle and New Kannada.

Two verbs are found with the meaning 'give,' with stems *koḍu-* (also *kuḍu-*; past stem *kofft-*) and *i-* (past stem *itt-*).

A small amount of field-work that I was able to do on Badaga, a dialect of Kannada spoken in the Nilgiris (the home of Toda and Kota), showed that it has *ta-* in the sense 'give to 1st or 2nd person'⁹ and *koḍu-* 'give to 3rd person'. The specimen in the LSI also shows these meanings (403-5). There can be no doubt that Badaga is a dialect of Kannada; LSI (401) characterizes it as showing some agreements with Old Kannada rather than with New Kannada. How is it then that Badaga shows a distinction that Kannada does not show in any of its records, so far as I have been able to find?¹⁰ I suggest that Badaga has borrowed from Toda or Kota or both (see §§6 and 7 for the distinction in these two languages). Historically this is plausible enough; the Badagas have been in the Nilgiris for sufficiently long and on such terms with both Todas and Kotas that a borrowing of this kind can be considered possible. That being so, the Badaga evidence need not be taken as suggesting that Kannada possessed these meanings for these verbs within its historically attested period.

5. COORG (Kodagu).

(a) 'Come':

past tense *band-* (1sg. *bandḡ*), with an irregular 3rd person *ba'-tu*;¹¹

present-future tense *ba-* (1sg. *bapi*, 3rd person *baku*);

imperative 2sg. *ba'*, 2pl. *ba'-ri*;

other positive forms *bar-*;

negative form (undifferentiated for number and person) *bar-a*.

(b) 'Give to 1st or 2nd person':

past tense *tand-* (1sg. *tandḡ*), with an irregular 3rd person *ta'-tu*;

present-future tense *ta-* (1sg. *tapi*, 3rd person *taku*);

imperative 2sg. *ta'*, 2pl. *ta'-ri*;

other positive forms *tar-*;

negative form (undifferentiated for number and person) *tar-a*.

'Give to 3rd person': *koḍu-*, *koḍut-*.

6. KOTA.

(a) 'Come':

present-future and past tenses *vad-*;

⁹ I cannot accurately control the forms and refrain from giving them for this verb and for *ba-* 'come.'

¹⁰ The source of Tuttle's statement (AJP 50.153): 'It is true that Kanara *tā-* sometimes means "give" also,' is probably the entry in Kittel and Bucher's dictionary: 'bring, give.' I do not know what their evidence was for the second meaning; the opinion of an expert in the language would be desirable.—None of the other Kannada dialects of the LSI has the distinction seen in Badaga.

¹¹ Coorg goes with Kannada in showing *b-* for general Dravidian *v-*.

imperative 2sg. *va*·, 2pl. *va*·-*m*;

negative forms *va*·-*r*·;

future (1sg. *vakve*·), voluntative (1sg. *vake*·*n*), and a few other forms (*vake*·*dme*·*l* 'when had come,' *vaka*·*tme*·*l* 'if is to come,' *vave*·*ro*· 'must come') have stem *va*·.

(b) 'Give to 1st or 2nd person':

present-future and past tenses *ta**d*·;¹²

imperative 2sg. *ta*·, 2pl. *ta*·-*m*;

negative forms *ta*·-*r*·;

future (1sg. *takve*·), voluntative (1sg. *take*·*n*), and a few other forms (*take*·*dme*·*l* 'when had given,' *taka*·*tme*·*l* 'if is to give,' *tave*·*ro*· 'must give') have stem *ta*·.

'Give to 3rd person': *ko**r*·, *ko**t*·.

7. TODA.

(a) 'Come':

present-future and past tenses *po**d*·;

imperative 2sg. *po*·, 2pl. *po*·-*s*;

negative forms *po*·-*r*·;

desiderative (1sg. *pašepini*) and dubitative (1sg. *pašpini* 'I may come') have stem *pa*·;

voluntative (1sg. *paškin* 'let me come') has stem *paš*·.

(b) 'Give to 1st or 2nd person':

present-future and past tenses *to**d*·;

imperative 2sg. *to*·, 2pl. *to*·-*s*;

negative forms *to*·-*r*·;

desiderative (1sg. *tašepini*) and dubitative (1sg. *tašpini* 'I may give') have stem *ta*·;

voluntative (1sg. *taškin* 'let me give') has stem *taš*·.

'Give to 3rd person': *kyur*·-, *kyurt*·.

8. TELUGU.

(a) 'Come':

infinitive *ra*· (classical *ra*·*n*);

imperative 2sg. *ra*·, *rammu*, 2pl. *raṇḍi* (classical *raṇḍu*);

other positive forms *va*·- (*vast*·-, *vatt*·-, *vacc*·-, *vatsts*·-);

negative forms *ra*·-.

The forms with initial *r*·- are derived in the pre-Telugu period from a stem **var*- plus vowel, by the rule (which is only approximate): when *r*, *ṛ*, *l*, or *ṛ* (> Telugu *ḍ* or *r*) comes between two vowels forming the first and second syllables of a pre-Telugu word, the first vowel being short, the second vowel assimilates to the first in quality, and, if the accent shifts to the second syllable, the first vowel is lost

¹² Alveolar *ḍ* instead of dental *d* required by Tamil *tant*·-, Kannada *tand*·-, Toda *tod*·-, etc., is still unexplained; the verb should entirely parallel 'come' in Kota as in the other South Dravidian languages.—I have passed over in silence the correspondence of Kota *-d*·-, Toda *-d*·- with Tamil *-nt*·-, Kannada *-nd*·-; it requires separate treatment.

with frequent lengthening of the second. This happens sometimes also with a few other consonants.¹³

(b) 'Bring':

infinitive *te* (classical *te-ran*);

imperative *te*, *temmu* (classical *te-rumu*), 2pl. *teṇḍi* (classical *teṇḍu*, *te-ranḍu*);

other positive forms *te*- (*test*-, *tett*-, *tecc*-, *tetsts*-);

negative forms *te*- (classical *te-ra*-).

'Give': *i*- (*ist*-, *itt*-, *icc*-, *itsts*-).

9. KOLAMI.

(a) 'Come':

present-future tense, the gerunds and forms based on them, *va*- (in the present-future and the gerund of continuous action, the stem is followed immediately by a vowel, e.g. present-future 1sg. *vaatun*, gerund *vaa*);

past tense *vatt*-;

past durative *vadd*-, *vann*-, *van*- (parallel to *tind*-, *tinn*-, *tin*- from *tin*- 'eat');

future *var*-, or optionally *vad*-, which is *va-d*- (parallel to *tin-d*- from *tin*- 'eat');

imperative 2sg. *va*·, 2pl. *va-r*;

negative forms *var*-.

(b) No independent forms are found from a root beginning with *ta*-. However, the verb meaning 'bring', which has stems *ko*-, *kott*-, *kodd*- etc., *kor*-, parallel to *va*- etc. of the verb 'come', has even greater irregularity in the imperative. The imperative 2sg. and 2pl. *ko*· and *kor* mean 'give!' The forms for 'bring!' are *kota* and *kotar*. These are marked as unified words by initial stress accent. As in all Kolami words in phrase-final position, the vowels of the final unaccented syllables are phonetically long; when not in phrase-final position, such syllables are phonetically short. These two words will probably always occur in phrase-final position. They are however to be analyzed and written phonemically as they have been above, in spite of their phonetic forms *kota*· and *kota*·r. In other words, the structure of Kolami words in sentences is such that it is not possible to make a judgment as to whether historically the *a*-vowels of these two words represent short or long vowels. Yet we can have no hesitation in identifying *-ta* and *-tar* with the **ta*· and **tar* expected on the basis of Kolami *va*· and *var*·. We have, then, the stem *ta*- and the form *ta*· parallel to *va*- and *va*·. The forms *kota* and *kotar* were originally **ko ta*· and **ko tar*·, *ko*

¹³ A combination of K. V. Subbaya, *Dravidic Studies* 2.40, 44-5 (Madras, 1923), and L. V. Ramaswami Aiyar, *Quarterly Journal of the Mythic Society* 22, 448-80. So far as I can find, no watertight statement has yet been made of the conditions under which the accent shifts to the second syllable, though Ramaswami Aiyar's article carries the matter a long way forward. Our word is irregular in its simplification of the initial consonant cluster *vr*-; cf. Telugu *vre-lu* 'finger': Tamil *viral*, Kannada *biral*, *beral*, *beral*, Kota *verl*, Toda *pe-l*, Kolami *vende*; Telugu *vra-yu*- 'write': Tamil *varai*-, *varaint*-, Kannada *bare*-, *bared*-, Kota *varv*-, *vard*-, Toda *par*-, *parθ*-. I know of no explanation.—I hope to treat the whole matter in a later article.

being the short form of the gerund of continuous action and **ta* and **tar* being the imperative forms of a verb, now otherwise lost in the language, meaning also 'bring'.

An etymology for *ko-* is not quite certain. However, there are some slight indications that it is cognate with Tamil *koṭu-*, Kannada *koḍu-* 'give', Malayalam *koṭu-*, Kota *kor*, *koṭ-*, Toda *kūur-*, *kūurt-* 'give to 3rd person'. Within Kolami itself we find interchange of *ḍ/ṭ* and *r* in *opaḍ-*, *opaṭ-* 'to be found' : *oparip-* 'to find'; *paḍ-*, *paṭṭ-* '(turn in game) is won' : *part-* 'to win (one's turn in a game)'. Kolami *turk-*, *turkt-* 'to put (fuel) on fire' is cognate with Tamil *cuṭu-*, *cuṭṭ-* 'be hot, burn; burn up, roast, fry, burn (brick)', Kannada *suḍu-*, Telugu *cuḍu-*, Kota *tur-*, *tuṭ-* 'roast, bake (pots), burn (corpse)', Toda *tur-*, *tuṭ-* 'burn (transitive)'.¹⁴ Kolami *a'kri* 'flame' is borrowed from Marathi *ākṛī* 'fire.' This would allow *kor-* to be a derivative of **koṭ/ḍ-*. We should have to explain the other stems as due to the analogy of the stems for 'come' and those for 'bring' implied in *kota*, *kotar*. As there is shift of meaning for *ta-* between 'give to 1st or 2nd person' and 'bring', here also there is a similar shift from 'give' to 'bring.' The meaning 'give' is still found in the imperative korms *ko* and *kor*. The prehistoric (pre-Kolami) meaning of **ko ta* was probably 'giving bring it!'

The usual Kolami word meaning 'give' has stem *si-*.

10. BRAHUI.

(a) 'Come':

imperative 2sg. *ba*, *bar*, 2pl. *ba-bo* (*bar* is based on the general positive stem *bar-* by analogy with regular verbs);

past tenses *bass-* (? < **ba-s-*, with the *s*-suffix of the past tenses of some verbs, Bray 1.131 f.; the lengthening of *-s-* is probably somehow due to its position after a short vowel; but see §24);

infinitive *bann-ing* (the history of this stem will not be treated);

other positive forms *bar-*;

negative forms *ba-t-* (past tenses *ba-t-*, other forms *ba-f-*).

(b) 'Give':

imperative, present indefinite, present-future *e't-*;

past tenses *tiss-* (? < **ti-s-*; cf. *bass-* above);

infinitive *tin-ing*;

other positive forms *tir-*;

negative forms *ti-* (past tenses *ti-t-*, other forms *ti-f-*).

This is a suppletive verb, neither of the bases being connected with **ta-*. It has been pointed out that the *ti-* stems are connected with Gondi *si-*, Oraon *ci?*, Malto *ci-*, Kolami *si-*, Kui *si-*.¹⁵ The connection of *e't-* is not so certain; I would think of Tamil, Kannada, Telugu *i-*, disagreeing with L. V. Ramaswami Aiyar's suggestion of Tamil *eṭu-*, *eṭutt-*, Telugu *ett-* 'take' as the cognates.¹⁶

¹⁴ That *c-* and *t-* interchange in this verb was already noticed by L. V. Ramaswami Aiyar in Journal of the Department of Letters, University of Calcutta 19.8.7. It should be noted however that Toda usually has *t-* when other South Dravidian languages have *c-* and in fact has no *c-*.

¹⁵ L. V. Ramaswami Aiyar, in IA 62.150.

¹⁶ Journal of Oriental Research, Madras 4.62.

Admittedly the phonological developments have not been traced to substantiate either suggestion; but below I reduce the stem in Brahui to *e-*, which automatically makes Ramaswami Aiyar's suggestion untenable. But whatever the relationship of the stem *e-t-* may be, it is clear that the remaining stems of the verb show the same type of irregularity that is found in 'come' and in the verb 'bring' whose stems are given and discussed immediately below.

'Bring':

imperative 2sg. *hata*, *hatar* (the latter is based on the general positive stem *hatar-* by analogy with regular verbs);

past tenses *he's-*;

infinitive *hat-ing*, *hatin-ing*, *hatar-ing*, *hatir-ing*;

other positive forms *hat-*, *hatar-*, *hatir-* (the last not in those forms where 'give' does not have *tir-*);

negative forms *hati-* (past tenses *hati-t-*, other forms *hati-p-*), and *hat-t-* in past tenses.

Bray makes the first step in the analysis, suggesting that the longer stems are compounds (1.158; 2.133). They are made up of a first element *ha-*, followed either by the stems *tir-*, *tin-*, *ti-* of the verb 'give,' or, in the positive, by a parallel stem *tar-*, with *ta* in the imperative (cf. *ba* 'come!'). These, *tar-* and *ta*, are undoubtedly related to the verb **ta-* that we are investigating. There seems to be little doubt also that the meaning of the verb for this language is 'give,' since that is the meaning of the parallel verb *ti-*. It remains to note that Bray considers *ha-* to be derived from *hal-*, the stem meaning 'seize, take';¹⁷ the combination, now apparently unified, had a semantic development: 'having taken give' > 'bring.'

The shorter stem *hat-*, seen in the positive (except in the imperative and the past tenses) and in the negative past tenses *hat-t-*, is an analogic development, probably based on imperative 2sg *hata*, which could be interpreted as *hat-a*, like *tar-a* 'spin!' from stem *tar-* (Bray 1.121), or on present indefinite and present-future forms such as 1sg. *hat'e'v* and *hat'e'va* respectively, the history of which is discussed below, but which could be interpreted as *hat-* plus personal endings, like *kun'e'v* 'I may eat' from stem *kun-* etc. (Bray 1.124).

¹⁷ This undoubtedly is correct.—Much less likely is his connexion of *hal-* with 'Tam., Mal., Kan. *ko*l, Tel. *kon*, Tuł. *ko*ŋ'; the improbability was pointed out by Tuttle in a review (JAOS 56.354). A dozen or more clear etymologies in Bray 2 show Brahui *h-* plus vowel cognate with an initial vowel of most of the other Dravidian languages, with an occasional *h-* in Gondi, there being no other certain equation for Brahui *h-*; e.g. *he-ŋ* 'she-goat': Telugu *e-ŋa*, Tulu *e-ŋu*, Oraon *e-ŋa*, Tamil, Malayalam *a-ŋu*, Kannada *a-ŋu*; *hi-niŋ* 'to lamb, calve, foal': Tamil *i-n-* ('animal) bears young', Malayalam, Kannada, Telugu, Kota, Toda *i-n-*. The only other etymology that Bray suggests with *h-* cognate with *k-* is for Brahui *hulli-* 'horse', for which he gives tentatively as etymon Tamil *kutirai* and its cognates. But this group of Dravidian words has been somewhat disputed, and in any case the etymology seems improbable. Tuttle's suggested connexion with Burushaski *huldžai-* 'mount a horse' (JAOS 56.355) is at least a little better. Brahui *hal-*: Tamil *ko*ŋ- etc. is thus left isolated. I have no better suggestion to offer. Note that Bray's *h* in this word, as in most others, is a glottal stop, and that for this and some other cases of initial *h* there occurs zero as a free variant (Emeneau, BSOS 8.982-3). The historical problem of the Brahui glottal stop is still unsolved. Tuttle unjustifiably ignored the problem by simply neglecting the recorded *h* in the solution in which he derived both *hat-* and *e-t-* from **at-* (AJP 50.152 ff.).

The stem *he's-* of the past tense is not transparent. Bray suggested that *-s-* is the past-suffix found in some verbs (1.131 f.), but he did not go beyond this. I would suggest that the remainder *he-* is **h(a)-e-*, the latter component being the *e-* seen in the suppletive stem *e't-* of the verb 'give.' This implies that *e't-* is **e-* plus the additional material *-t-*. It will not do to equate this with a dental suffix of (say) South Dravidian (§1), for no other Brahui verb has a dental suffix in just the forms which in this verb are based on *e't-*; the place for such a suffix in Brahui is in the negative past tenses. The fact is that there seems to be no Brahui verb with a stem ending in *-e-*. If there were, it could probably be handled in imperative, present indefinite, and present-future without difficulty (cf. *pa'v* 'I may say', present indefinite 1sg. < **pa'-iv* from the stem *pa-*), though there might be conflict with such forms as *ke'v* 'I may do' < **ka'-ev*. But it may be suspected that **ev* 'I may give' < **e'-iv*, **e'* 'he may give' (if this would result from **e'-e*), **e'* 'give!' and so on, would be embarrassing, partly because of homonymies, partly because in present indefinite and present-future the forms would be identical with the suffixes of those verbs that have the suffixes accented (cf. *kah'e's* 'thou mayest die', **e's* 'thou mayest give'). Whatever the exact reason, these short forms were avoided by the introduction of *-t-*, probably from the other stems *tir-*, *ti-*, etc. The introduction might have been from the short stem *hat-* of the verb 'bring'; this explanation would perhaps make the place of the *-t-*, at the end of the stem, more plausible.

Bray recorded some further forms of the verb 'give' as being used by 'the more wild Brahuīs'. These are, in the present indefinite, *te'v*, *te's*, *te'*, etc. instead of *e'tiv*, *e'tis*, *e'te*, etc., and in the present-future, *te'va*, *te'sa*, *te'k*, etc. instead of *e'tiva*, *e'tisa*, *e'tik*, etc. He analyzes them as being from the stem *ti-* (1.125-6). This implies *te'v* < **ti'-iv* or **ti'-ev*. For these developments there are no closer parallels than *pa'v* < **pa'-iv* and *de'v* < **da'-ev*. The latter at once, however, suggests that we are dealing not with *ti-*, but with *ta-*, which we have found with the meaning 'give' in the combinations *ha-tar* and *ha-ta*. We have, then, *te'v* < **ta'-ev*, a perfect parallel to *de'v* < **da'-ev*, *ke'v* < **ka'-ev*, etc. (and, incidentally, our assumption above of *he's-* < **h(a)-e-s-* is strengthened on the phonological side). Similarly we should analyze the present indefinite and the present-future of the verb 'bring', 1sg. *hat'ev* and *hat'eva* respectively, as from *ha-ta-* plus the accented endings (see above).

We end with 'give' in Brahui being represented by three verbs with general Dravidian cognates: (1) *ta-*, *tar-*, imperative 2sg. *ta*, cognate with the verb *ta-* of the paper; (2) *ti-*, *tir-*, cognate with Central Dravidian *si-/ci-*, and showing an *-r-* in the same places where *tar-* and *bar-* 'come' show it, except in the three tenses where the stem is replaced by *ta-* or *e't-* (cf. §23); (3) *e-* (in *e't-* and *he's-*), cognate with Tamil, Kannada, Telugu *i-*.

11. GONDI. Of all the published material on the Dravidian languages, that for this language, or group of dialects, is on the whole the worst, with the possible exception of that for Malto. I have extracted from it what I could for this problem, and follow especially Trench (referred to as T.), with some added items from the LSI and from Mitchell (referred to as M.).

(a) 'Come':

In T. the stem for the three past tenses and for the various 'participles' is *wā-*; for the present, future, conditional, negative, 'supine', and 'infinitive' T. gives *wāi-* before consonants, *wai-* before vowels (and in the prohibitive, *wai-* before a consonant), M. and LSI *va-y-*. If T. is to be trusted (which is certainly doubtful), Gondi possibly has two stems here, *wā-* and *wā-*, since in some of the *wāi-* forms *i* is parallel to suffixal *i* of other verbs and hence could be interpreted as a suffix (e.g. imperative 3sg. *gūhāl*, *wānkāl*, *ānnāl*, *wāil*; present 1sg. *gūhtātonā*, *āndātōnā*, but *wānkātōnā*, *wāitōnā*, etc.). But not much can be built on such evidence against M.'s and LSI's *va-y-*, and it will be safer to operate only with *wā-*, i.e. *va-*.

Imperative 2sg. and pl. *wārā*, *wārāḥ* (so T. 17, but 31 *wārāḥ*, which is probably a misprint); *r* is the normal Gondi representative of general Dravidian *r* after a vowel (so Tuttle, Dravidian Developments 22, §35).

In this verb, then, we can be sure only of the two stems **var-* and **va-*, but suspect that there may be also **va-*.

(b) 'Bring':

In T. the stem for all positive forms except conditional and imperative is *tāt-* before vowels, *tāl-* before consonants; the conditional, the imperative, the negative and the prohibitive have the stem *tār-*. (M. is almost the same, except that he has *r* for *r* in the only form he gives, as does T. in the imperative 2pl. on 31.) The stem *tāt(t)-* is from the general Dravidian **ta-*, with either the dental suffix of the second stem in South Dravidian (§1), or another dental suffix seen in Kui (§21).

'Give': T. gives *sā-*, but M. *hi-* (so also LSI for Bastar and some other dialects, with a statement that in these dialects initial *h-* represents initial *s-* of the other dialects, presumably in Dravidian words only).

12. TULU.

(a) The data for this language are not as full as could be desired. Neither Brigel nor Männer indicates whether the verb 'go' is irregular. It probably is not, and, relying on Männer's dictionary, we find that it has the stem *bar-* throughout.

(b) Männer has an entry: 'tarpāvuni, tarpuḍuni c[ausative] v[erb] (of tarpuni) To cause to bring, send for. 2. to get, obtain'. This implies **tarpuni*, i.e. a stem *tar-*, with meaning 'bring' and possibly also 'give', which is however not recorded; Tuttle has suggested (AJP 50.153) that this verb may have been based on Kannada *ta-*.

The stem with meaning 'give' is in the Brahmins' dialect *koḷ-*, in the Bants' dialect *kor-*, both cognate with Tamil *koḷu-*, etc. (L. V. Ramaswamy Aiyar, Materials 406; my own very scanty field-notes on this language indicate that this verb may have any person as indirect object).

13. ORAON (Kurukh).

'Come': the stem is *bar-* throughout, the language having no negative forms. No cognate has been found to Gondi *tāt-*, general Dravidian **ta-*.

The verb meaning 'give' has stem *ci'*,¹⁸ that meaning 'bring' the stem *ondr-*.

¹⁸ So it seems we must interpret Grignard.

14. MALTO.

The situation for this language is practically identical with that of Oraon.

'Come': the stem is *bar-* throughout; the negative forms of Malto are analytic in origin and show no difference of stem.

The stems meaning 'give' and 'bring' are closely connected with those of Oraon—*ci-* and *ondr-*.

15. KUI. The material for this language has been left to the last, because it shows a system of quite a different type from that of the other languages.¹⁹

(a) 'Come': a stem *va-*, conjugated according to Winfield's 3rd conjugation (infinitive *va-va*, future 1sg. *va-i*, past 1sg. *va-te*, present gerund *va-i*, past gerund *va-ja*) with perfect regularity, except that, beside the regular imperative 2sg. *va-mu*, there is found also a short form *va* (Winfield, Vocabulary 127).

(b) 'Bring': a stem *ta-* conjugated according to Winfield's 2nd conjugation with perfect regularity (infinitive *ta-pa*, future 1sg. *ta-i*, past 1sg. *ta-te*, present gerund *ta-pi*, past gerund *ta-sa*).

'Give': a stem *si-* conjugated according to Winfield's 3rd conjugation with perfect regularity (infinitive *si-va*, future 1sg. *si-i*, past 1sg. *si-te*, present gerund *si-p-ki*, past gerund *si-a*).

Although none of the irregularities so blatant in most of the other languages is found here, even a cursory glance through Winfield's description of Kui discloses phenomena that leap to the eye as being connected somehow with the irregularities that we have been meeting (Grammar 101–11).

Kui has a set of '1st and 2nd person transition particles'—in other words, suffixes added to the verb stem (and then followed by the regular conjugational mechanisms) when the verb has a 1st or 2nd person, expressed or understood, as direct or indirect object. The suffixes are in positive forms *-a-*, in negative forms *-ara-* or *-aja-*, with *-ara-* or *-aja-* alternatively used in the 1st conjugation in the following positive forms: future 1st and 2nd sg., and imperative 2sg. and pl. In the 2nd conjugation, *-t-* appears between stem and 'transition' suffix, in the 4th conjugation *-d-* with some irregular morphophonemic alternations (*-t-* and *-d-* are parallel to suffixes found in these conjugations in various forms of the simple paradigms). A few forms for the verb stems in which we are interested are: *va-a-nu* 'they will come (to me, you, us)', *va-a-mu* 'come (to me)!', *va-ara-?enju* 'he will not come (to me, you, us)'; *si-a-i* 'I will give (to you)', *si-a-mu*

¹⁹ Winfield's grammar is, for the morphology, one of the best descriptions of a non-literary language ever published. It is possible to use his material for almost any type of re-statement that one wishes and to be certain that there are few gaps or ambiguities in it. So much more is it a pity that in syntax he is less good and that in the phonology he was very weak in his handling of the glottal stop. This occurs frequently as the only phoneme differentiating two forms (e.g. *ko'a* 'having reaped' [Winfield *kōa*] : *ko'ʔa* 'do not reap!' [Winfield *kōā*]), and all negative forms of the verb are marked by a suffix beginning with *ʔ* (indicated by Winfield by a dieresis over the following vowel). But it is not mentioned in the phonological section of the Grammar, and only appears on pp. 62–3. We may suspect that the glottal stop occurs elsewhere than in this one morphological context, and in fact, the earlier grammar by Friend-Pereira records it elsewhere (see also Tuttle, Dravidian Developments 23, §39); so also does Schulze's grammar of the very closely allied Kuvi.

'give (to me)!', *si'-ara-ʔa* 'don't give (to me)!'; *ta-t-a-te* 'I brought (to you)', *ta-t-a-mu* 'bring (to me)!', *ta-t-ara-ʔalamu* 'we didn't bring (to you)'.²⁰

16. The first step in an historical analysis is obvious—the irregular *r* of the negative forms of the verbs **va-* and **ta-* is connected with the Kui suffix *-ara-* found in the negative.²¹ The further details of the analysis are not so obvious, but we can, I think, find our way through the jungle. My solution rests on two principles. The first is the postulate that forms that are irregular compared with the norms of the Dravidian verb system are more archaic than those that are regular.²² The second principle is that, as between the unexplained irregularities seen in most of the languages and the meaningful set of suffixes seen in one language (Kui), these suffixes being connected in several points with the irregularities, the suffixes represent more nearly the system of Proto-Dravidian, while the scattered irregularities are 'fossil' remnants of that system which the languages containing them have otherwise lost. It should be noted that I do not claim that Kui is in its regular set of suffixes identical with Proto-Dravidian, but only that Proto-Dravidian had a set of suffixes of which Kui preserves reflexes still systematized in much the same way, while all the other languages have lost the system and preserve only a few irregular remnants best explained in terms of the system reflected in Kui. The alternative to my second principle and its consequence, to find that Kui built up its system of regular suffixes on the basis of a few irregularities in two verbs in Proto-Dravidian, is highly implausible, and would leave the irregularities of these two verbs still unexplained.

A possible consequence of this second principle is a relative chronology in which Kui separates from the Proto-Dravidian stock first and the loss of the living suffixes takes place within the remaining undivided stock. Any other chronology will involve our assuming that each language or group of languages (and we are in no position to speak definitively about groups of languages yet) suffered the same loss independently—an uneconomic reconstruction.²³ The suggested chronology is set forth in detail in §22.

²⁰ Friend-Pereira gives a few positive forms containing transition suffixes, though without understanding either the morphology or the meaning (45 middle, 60 bottom). The specimens of the language in the LSI show at least two forms (465, *siāmu* 'give [to me]!' and *diānē* 'it will fall [to me]'), though there are several other places where such forms are to be expected but do not occur (e.g. 466, line 9 *gimu* 'make [me thy servant]!'). Kuvi, as described by Schulze, contains something akin to these suffixes, though he seems not to have worked out a thorough description. On pp. 126–30 he gives a suffix, *-ya-* after a vowel, *-a-* after a consonant, which added to the verb yields a stem called by him 'self-reflexive', denoting 'a distinction of favour shown to the person to which the verb relates'. All the forms that he gives have a 1st personal object, direct or indirect. He gives no negative forms. This must correspond to Winfield's *-a-* in positive forms.

²¹ Tuttle made the connexion in AJP 50.153–4 and JAOS 52.135, but did not go into detail. So far as I have been able to find, L. V. Ramaswami Aiyar has not treated the matter.

²² Cf. L. Bloomfield, *LANG.* 2.164, §68, Assumption H7.

²³ I am here using the same type of argument that E. H. Sturtevant has consistently used in arguing for Hittite's early separation from the parent Proto-Indo-Hittite and consequent innovations and losses of living processes within the remaining undivided Proto-Indo-European (most recently in *The Indo-Hittite Laryngeals* 23–9). As a method of reconstruction, this seems to be as sound as any of the commonly accepted methods of com-

It might seem economical to attempt first to set up starred forms and stems on the basis of all the languages except Kui, and then to explain them on the hypothesis set up, that the Kui suffixes are the key. This method, however, is somewhat too mechanical, since, as it seems, for the imperative 2sg. two starred forms must be set up, both being Proto-Dravidian and connected in terms of the Kui suffixes, and since one of the stem-types, that of **va-* and **ta-*, is only explicable as an analogical product in the period after Kui split off.

17. I set up for Proto-Dravidian:

- (1) a stem **va-* 'come' and a stem **ta-* 'give';
- (2) two suffixes **-a-* and **-ar-* (whether **-ar-* is followed by a vowel I cannot determine in this study), which are added to verb stems when the resultant forms are accompanied by an object, direct or indirect, denoting 1st or 2nd persons, **-a-* being used in positive forms, **-ar-* in negative forms (these I shall call transition suffixes, using Winfield's term);
- (3) a morphophonemic alternation: $a + a > a$.

It follows that in Proto-Dravidian each of the verbs **va-* and **ta-* (like all other verbs) had two complete conjugations depending on the person of its object (indirect in the case of these two verbs): 'come (to 1st or 2nd person)' and 'come (to 3rd person)',²⁴ 'give (to 1st or 2nd person)' and 'give (to 3rd person)'. Only Kui has preserved anything like this. All the other languages have lost the transition suffixes, but have remade the two verbs in question from a mixture of forms, some derived from the conjugation with the suffixes, some from that without them. There has been some analogical re-formation in some forms, in the direction of regularity. Only Tulu, Oraon, and Malto show complete regularization, and Oraon and Malto have only the verb 'come.'

18. That the reflexes of the transition suffixes have survived in some of the forms of these two verbs is not surprising. It is probable that for both the verbs 'come' and 'give' there was greater frequency of occurrence of forms combined with 1st or 2nd personal indirect objects than with 3rd person, i.e. forms meaning 'come to me!', 'give it to me!', 'I will come to you', 'I will give it to you', and the like, were more often said than forms meaning 'come (with me) to him!' and 'give

parative grammar, and I set it forth with as great clarity as possible so that it will be entirely clear just what my procedure has been.

I admit that the objection may be raised that so far only one point has been brought forward to which this method will apply and which will lead to separating Kui from Proto-Dravidian so early, and that consequently the loss of the transition suffixes in all the Dravidian languages but Kui is to be regarded as accidental and my suggested chronology as imaginary. The objection is valid and can only be met by showing that this point is but one of several. I cannot yet meet it in this way, and can only plead that in the present early stage of comparative Dravidian studies we must put forth as many such tentatives as possible in order to make any advance.

However, even if the chronology suggested in this paragraph is found unacceptable for the reason just stated, my second principle of reconstruction and the placing of transition suffixes in Proto-Dravidian is not affected and will have to be combated on other grounds. The further details of the suggested chronology are in §§22, 23, 26.

²⁴ Cf. Emeneau, *Kota Texts*, Part One 54, text 4, sentence 7: *ni-dan, en bebi va*. 'you also come with me (to that man)!' I give the example to show that this type of locution is a good Dravidian construction, and not a figment based on English usage.

it to him!' Forms with the suffixes consequently tended to be perpetuated rather than those without them. And it seems that in part of South Dravidian (Tamil, Malayalam, Coorg, Toda, Kota) the meaning 'give to 1st or 2nd person' was the only one that remained attached to forms from **ta-* in an early period of Tamil (§2b) and down to the present day in the other languages (§§3b, 5b, 6b, 7b). Kannada, it seems, shows no traces of this (§4b); is this because it stood apart from this development, or, more probably (§22), because in the pre-Kannada period it shared in it but, still in that period, lost it? This development is not found elsewhere. In fact, Telugu, Kolami, Gondi, Tulu, and Kui itself show another development, from 'give' to 'bring', though the forms retained are, outside of Kui, in general a mixture from the conjugation with the transition suffixes and that without them. For a more precise discussion, see §22. That the Proto-Dravidian meaning of **ta-* was 'give' is guaranteed by the occurrence of this meaning in Brahui (as well as the South Dravidian development), attached to a different selection of forms from those found in South Dravidian.

19. My third assumption for Proto-Dravidian in §17, the morphophonemic statement $a + a > a'$, cannot, to the best of my knowledge, be paralleled yet in the present stage of Dravidian studies. But, in fact, so few stems and suffixes have yet been isolated in Proto-Dravidian form that that is not surprising. It seems, on a rapid survey of the verb stems of the languages which are generally regarded as somewhat archaic, that **va-* and **ta-* may be the only monosyllabic verb-stems ending in *-a-*, or indeed in any short vowel. However, I feel fairly confident that it is only by means of a morphophonemic alternation of this kind that we shall be able to explain the irregularly long vowels of **va'*, **va'r-*, **ta'*, **ta'r-*; I shall attempt no further justification.

20. (a) To proceed to details, I treat first the imperative 2sg. of **va-* 'come'. The imperative 2sg. generally in Dravidian is the first stem with zero-suffix. The South Dravidian languages—Tamil, Malayalam, Kannada, Coorg, Kota, Toda—and Kolami have forms warranting Proto-Dravidian **va'*. This form is to be interpreted as **va-a*, *-a* being the transition suffix of positive forms, the morphophonemic alternation discussed in §19 working, and the form meaning 'come (to me)!' Brahui has *ba*, which is irregular since all other Brahui forms are based on a stem *bar-* except possibly the past *bass-* (§§22a, 24a), and Kui has *va*, which is irregular since all other Kui forms are based on a stem *va'-*. These two languages, not being closely related, give evidence for Proto-Dravidian **va*, the form without the transition suffix. For all the languages of the first group, the forms are irregular, (1) in the length of the vowel as compared with the short vowel of the various positive stems (and in Coorg and Kolami, of the negative stem as well, though the shortening in the negative is secondary; see §22a);²⁵ (2) in the absence of *r* as compared with the negative stem, since in regular verbs negative forms and imperative 2sg. have the same stem.

²⁵ In all the languages of this group including Kolami, a monosyllable ending in a short vowel is generally a nonpermitted form phonemically; but is not this phonemic limitation merely the effect of a sum of such processes as we are assuming? In any case, this will not explain away the second irregular feature. It seems best to explain what we have. In Brahui and Kui, monosyllables end in both long and short vowels.

It was said above (§17) that Tulu, Oraon, and Malto have regularized the verb throughout; the stem carried through is discussed below (§26a).

Gondi has an imperative stem *var-* that is irregular since all other forms have the stem *va-*; there has been extensive analogical re-formation in this language (§§21a, 22a).

Telugu has *ra-*. The general statement for the forms with initial *r-* in this language was given in §8a. It only needs to be said for the imperative 2sg. that it derives probably from **var-u* > **vara* > *ra-*, it is an analogical formation from the stem *var-* found elsewhere in the Telugu verb (§26a).

Other imperative forms may in general be passed over without extended comment. They are based by analogy on other stems (2sg. Malayalam *var-ika*; 2pl. Tamil *va-r-um*, Malayalam *var-uvin*, Kannada *banni* [see fn. 7 for an explanation]), or on the imperative 2sg. (Telugu 2sg. *rammu*, 2pl. *raṇḍi/u*), or are made from the imperative 2sg. with a regular plural ending (Coorg *ba-ri*, Kota *va-m*, Toda *po-s*, Brahui *ba-bo*).

Kolami's 2 pl. *va-r* shows the stem *va-* without the transition suffix, plus a plural suffix. There can be no question of analogy here, I think; this is the only language which, without analogical reworking, shows in the imperative 2sg. and 2pl. one form with the transition suffix and one without.

(b) For the verb *ta-*, everything is as for *va-*, except in Kui and Telugu, and there is no need to repeat. Note that the Kolami forms **ta-* and **tar* are the only forms of this verb in the language (§9b).

Kui has the stem *ta-* throughout the verb without any irregularity in either the suffixless or the suffixed paradigms.

The main problem of the Telugu forms, the quality of the vowel, will be discussed below (§23). Once that is explained, the imperative 2sg. *te-* is obviously parallel, not to Telugu *ra-* 'come!', but to South Dravidian-Kolami *va-*. The forms *temmu* and *teṇḍi/u* are analogical and based on other positive forms and on *te-*; *terumu* and *te-raṇḍu* are based on the negative stem.

21. At this point, the treatment of Gondi and Kui should be finished, since each has in all remaining forms one stem only, with no suffixal material that has not yet been discussed in detail.

(a) Gondi seems to have a stem *va-* everywhere except in the imperative; we found some evidence for *va-* as well, but it was of very doubtful character. There is still a good deal of evidence to be added (in §24a) to that of §20a for a stem **va-* in general. Consequently, it seems best to interpret Gondi *va-* as **va-a-*, exactly as for the general Dravidian imperative 2sg. *va-*. The Gondi use of *va-* as stem in the negative (instead of a form reflecting the suffix *-ar-*) must be taken as secondary, an extension of the positive stem throughout the verb, which is analogical with the use in regular verbs of one stem in the negative and in all positive forms except the perfect and the past.

The explanation of the general stem *va-* in Kui is difficult. Monosyllabic stems ending in a short vowel are rare in the language, but they do occur, and it is not possible to explain *va-* as having its length because of 'Systemzwang'. If we are to explain the long vowel at all (and it is necessary to make an attempt since Kui has the irregular imperative 2sg. *va*, and since we have decided on the

basis of the imperative **va* and other evidence to be treated below that the Proto-Dravidian stem was **va-*) we are faced with two possibilities. One, a very improbable one, is that *va-* is from **va-a-*, already containing the transition suffix. This we may reject without further discussion, I think. The remaining possibility is that **va-* has been replaced by *va-* because of the analogy of some other verb with a long vowel, probably one with which it occurs frequently in a set phrase. Lack of Kui texts²⁶ prevents our knowing what such phrases might be, and I should hesitate to make any suggestion. The verb 'go', which comes to mind as a possible source of the analogy, is ruled out at once; in Kui its stem is *sal-*, and none of its forms has *a-*.

(b) The general Gondi stem for the verb *ta-* is *tat(t)-* which in §11b was thought to be from *ta-* with a dental suffix. Two possible sources were suggested for the suffix, either the dental suffix of the second stem in South Dravidian (also found in other past tenses in other Dravidian languages), or another dental suffix seen in Kui. Kui has throughout all forms of this verb the stem *ta-*, which belongs to a conjugational type that takes a suffix *-t-* between the stem and the transition suffixes (as well as elsewhere in its conjugation; it has also a past suffix *-t-*). It is perhaps preferable to regard Gondi *ta-t-* as showing this same *-t-*. The whole question of the dental suffixes in Dravidian verbs needs definitive treatment.

22. The negative stem.

(a) Of the South Dravidian languages, Old Tamil, Old Malayalam, Old Kannada, Kota, and Toda have negative stems which warrant our setting up a starred form **va-r-*. This is irregular in length of vowel as compared with **vand-* of the past tense, and New Tamil, New Malayalam, and New Kannada have substituted a short vowel for the long (respectively *var-*, *var-*, *bar-*). Coorg and Kolami have short vowel stems (*bar-a* and *bar-*), and Tulu's one stem for all forms of the verb is *bar-*. In all except Tulu, these stems have another irregularity in showing *r* when the imperative 2sg. has no *r*.

Our first principle of reconstruction stated in §16 was that forms that are irregular compared with the norms of the Dravidian verb system are more archaic than those that are regular. A corollary to this is that the more irregular is more archaic than the less irregular, in cases when the irregularities can be quantitatively judged. Consequently, although so far **va-r-* need be only Proto-South-Dravidian, we are justified in going on to consider it Proto-Dravidian rather than **var-*, since it has two irregularities as against one of **var-*. The Coorg and Kolami stems are analogical, therefore, in the same way as those of New Tamil, New Malayalam, and New Kannada. The Tulu stem *bar-* is similarly analogical, but all other stems have been lost (§26a).

The Telugu *ra-*, like all Telugu forms with initial *r-*, goes back to pre-Telugu **var-*; this, like the **var-* of some of the South Dravidian languages just discussed, has a short vowel on the analogy of the past stem *vand-* (and other forms with *va-*).

²⁶ A translation of the Bible would be valueless for this purpose; a natural style is required, unfettered by foreign material being translated.

The secondary use of positive *va-* in the negative in Gondi has been discussed (§21a); this *va-* implies a negative **va-r-* in the pre-Gondi period or in an early stage of Gondi, as does the imperative stem *var-*, the **-r-* of which is only derivable from the negative forms.

Brahui *ba-* does not *prima facie* show either long vowel or *-r-*; but the use of *bar-* in positive forms, except for the one imperative form and possibly the past tenses, implies that *ba-* is derived from **bar-* or **ba-r-* (see further discussion below in §26a).

The former possession of a negative stem with *-r-* is also to be inferred for Oraon and Malto, which have *bar-* in all forms, but Oraon has no negative forms at all and Malto has only analytic negative forms.

The Proto-Dravidian negative stem **va-r-* is to be interpreted as **va-ar-*, *-ar-* being the transition suffix of negative forms, the morphophonemic alternation discussed in §19 working, and the stem meaning 'come to 1st or 2nd person'. The extension of the use of *r*-forms to contexts where the indirect object is a 3rd person has taken place in all the languages except Kui. Economy demands (see §16 and fn. 23) that we postulate for ancestral speakers of Kui a very early separation from the ancestral speakers of all the other known Dravidian languages, and for the latter a period of unity long enough to allow of the loss of the transition suffixes and the extension of **va-r-* forms in the negative to cover contexts with a 3rd personal indirect object. For possible objection to this line of argument, see fn. 23.

(b) For the verb **ta-* the same things in general must be said as for **va-*, for Tamil, Malayalam, Kannada, Coorg, Kota, and Toda. The Proto-Dravidian stem is **ta-r-*.

Telugu, since its vowel is *e*, cannot be used as evidence for **ta-r-*; its classical stem *te-ra-* is obviously however parallel to **ta-r-*. The modern negative stem *te-* is on the analogy of the imperative 2sg. *te*, while the classical imperatives *te-rumu* and *te-randu* and the classical infinitive *te-ran* are made on the analogy of the negative stem.

Brahui has no negative forms from this verb, but the stem *-tar-* found in some positive forms implies a former negative stem with *-r-*.

So also the Gondi imperative stem *tar-* and the Tulu stem *tar-* found in a causative formation imply former possession of a negative stem with *-r-*.

Kolami has no negative forms and no other forms that would imply a stem with *-r-*; Oraon and Malto do not have the verb.

The same remarks that were made for Proto-Dravidian **va-r-* at the end of (a) are to be made also for **ta-r-*.

It is now possible to be more precise about the meaning than it was in §18. Forms referable to **ta-r-* (as well as those referred to **ta-*) had in Proto-Dravidian the meaning 'give to 1st or 2nd person'. This meaning was extended to all forms of **ta-*, whether with *-r-* or not, in the South Dravidian languages; in Tamil, under unknown conditions of dialect and period, the meaning was extended also to cover a 3rd personal indirect object. In Kolami, Gondi, and Tulu, the development took place from 'give to 1st or 2nd person' > 'give' > 'bring'. Kannada has the meaning 'bring'. In most things this language is closely con-

nected with the South Dravidian languages; are we to see here an early borrowing from a language of type similar to Gondi and Kolami? Or are we to see a borrowing from Telugu, though Telugu has, as the bearer of the development 'give' > 'bring', not **ta-* but probably **te-* (vowel somewhat uncertain; see §23)? The position of Tulu is not quite certain; in this matter one could think of close connexion with the non-South-Dravidian languages or with Kannada, or of borrowing from Kannada (it has many borrowings from this language).

Brahui shares with Kolami, Gondi, and Tulu the first step only of this development, namely 'give to 1st or 2nd person' > 'give'. Its ancestral speakers apparently separated from the ancestral speakers of these languages early enough to escape the further development to 'bring'. How far back in an absolute chronology this enables us to push the separation of Brahui, it is impossible to say.

For Kui we must again postulate early separation from the other languages, and again there must be a period of unity of the other languages long enough to allow the loss of the transition suffixes. The meaning found in Kui can however only be the result of borrowing from a neighbor language, since it separated from the stock before this meaning developed. The neighbor language was probably Gondi. This may seem a roundabout, implausible reconstruction. On the other hand, to assume 'bring' as the Proto-Dravidian meaning of the stem **ta-* would require all the languages except Kui, since they have *r*-forms, to have derived their meanings from 'bring to 1st or 2nd person'. This would have been extended to cover the 3rd person by Kolami, Gondi, and Tulu, or by their common ancestor, if there was one. In the ancestor of all the rest, there would have been a development: 'bring to 1st or 2nd person' > 'give to 1st or 2nd person', and then there would have been a split into the South Dravidian languages, which generally kept this meaning, and Brahui, which made the further step to 'give'.²⁷ It is highly doubtful in general that there is such a close connexion between Brahui and South Dravidian, and it still seems that our first statement of development is preferable.

23. The vowel *e* in the Telugu verb *te-* 'bring' has been passed over so far, and I cannot find any discussion of it in the studies on Dravidian comparative grammar available to me.

I suggest that this verb is related to the Brahui *ti-* 'give', Central Dravidian *si-/ci-* 'give', at the same time fully realizing the difficulties involved, both of meaning and of phonology.

The phonological difficulty arises from the fact that we have already connected Brahui *e-* 'give' with Tamil, Kannada, Telugu *i-*. This gives us two not impossible vowel equivalences, Brahui *e* : Telugu *i*, and Brahui *i* : Telugu *e/e*, neither being well supported or accurately stated. The fact is, however, that very few phonetic correspondences in Dravidian have yet been stated completely, with all their limiting conditions. We are still in the stage when we are attempting to establish sets of etyma for some of the correspondences. All that

²⁷ It should be noted that this hypothesis would put the separation of Brahui from South Dravidian as far back as the pre-Christian period.

can be done in this case at the moment is to state the few etymologies that can be given to support these two equivalences.²⁸

(a) Brahui *e* : Telugu or South Dravidian *i/i*.

Brahui *ke-* and *ki-* 'below' : South Dravidian **ki*ʔ, Telugu *ki*, *ki-du*, *krinda*. But the Brahui *k* (instead of *kh*) before *e* is difficult; see T. Burrow, BSOS 11.136.

Brahui *ne-*, oblique stem of *ni* 'thou' : Telugu and South Dravidian **ni*, oblique stem **ni-*.

Brahui *-e-* past suffix : Telugu and South Dravidian *-i-*.

Brahui *pe-n* 'other' : Tamil *pira-*, Old Kannada *pera-*, Telugu *pera-*. One cannot be certain what vowel Proto-Dravidian had in the first syllable; see T. Burrow, BSOS 10.289-97.

Other cases of Brahui *e* occur corresponding to South Dravidian and/or Telugu *e*.

(b) Brahui *i* : Telugu or South Dravidian *e/e*.

Brahui *birr-ing* 'to separate out, select' : Tamil, Telugu *ve-ru-*, Kannada *be-ru-*.

Brahui *bis-ing* 'to be baked, cooked; ripen' : Tamil, Telugu *ve-* 'to be hot'.

Brahui *pir-ing* 'to swell' : Telugu and South Dravidian *peru* 'large'; Tamil *peru-*, *peruku-* 'to grow large', Telugu *perug-*.

Brahui *mir-ing* 'to plaster' : Tamil *meruku-* 'to smear'.

Also a few cases of Brahui *i* : Telugu or South Dravidian *e/e*.

Brahui *i* 'I' : Proto-Dravidian **e**n*; see Tuttle, Dravidian Developments 28-40.

Brahui *khi-sun* 'red' : Tamil, Telugu *cem*, Kannada *kem*.

Brahui *bi-n* 'hunger' : Kannada *be-ne* 'pain'; but Tuttle, JAOS 56.352, suggests rather Tamil *ve-n-* 'to want'.

Brahui *pi-un* 'white' : Tamil *vel-* 'to be white', Telugu *vel-*. But Tuttle, JAOS 56.359, points out that Brahui should have *b-* to correspond to South Dravidian *v-*, and suggests that *pi-* is from Afghan *spīn*.

The evidence on the whole is more abundant for (b), and we may proceed to draw what conclusions we can from the etymology Brahui *ti-*, Kolami *si-*, Gondi *si-*, Oraon *ci'*, Malto *ci-*, Kui *si-* 'give,' Telugu *te-* 'bring.'

The first question is whether the verb belonged to Proto-Dravidian. South Dravidian does not have it (nor does the doubtfully placed Tulu). On the other hand, we have posited an early separation of Kui from all the other Dravidian languages, and Kui has the verb in a shape that is fair evidence of its descent from Proto-Dravidian.²⁹ We shall answer this question affirmatively.

It is not yet quite clear what the vowel was in Proto-Dravidian, but it is certain, I think, that it was either *e* or *i*, and, if the etymologies given above are valid, more probably *e*. Whichever it was, it raises a question about points 2 and 3 of the reconstruction in §17. We may assume that Telugu, with its alternation of *e* and *e'*, is more archaic than Brahui with only *i*. A morphological and

²⁸ These were already indicated in Bray 2.

²⁹ L. V. Ramaswami Iyer, in *Journal of Oriental Research*, Madras 4.175: 'Kui initial *s* is from . . . (ii) common Dr. *ś*, *c* (which are either from ancient *k* or *t*).'

morphophonemic statement parallel to that of §17 is needed to account for the difference of vowel quantity and for the presence of *r* in some forms. Unless we are to say that this verb is analogically based on the verbs **va-* and **ta-* (which is possible), some modification of §17 (2) and (3) is necessary. There are two possibilities. The transition suffixes may be reconstructed as lengthening of final vowel of stem in positive forms, and lengthening of final vowel of stem and addition of *r* in negative forms. Or we may keep the suffixes **-a-* and **-ar-* and change the morphophonemic statement to: any vowel + *a* > *a*. I am at present unable to offer any additional evidence for either possibility. Whatever the solution, the discussion of the development of the various resulting stems will follow that of the developments from **va-* and **ta-*, i.e. *te* and *te-r-* are from **te-* plus the transition suffixes (§§20, 22), while *te-* may be the direct representative of the Proto-Dravidian forms without transition suffix (§24); Brahui *tir-*, on the other hand, is to be interpreted like *tar-*.

The Telugu meaning 'bring' is secondary to the meaning 'give' of the other languages which have the verb. The development may be the same as that found for **ta-* in §22b: 'give to 1st or 2nd person' > 'give' > 'bring'; or, better, since we have no language in which the meaning 'give to 1st or 2nd person' is found, the meaning 'give' (with the person of the indirect object unspecified) may have been attached to all forms and then Telugu had the development 'give' > 'bring.' This again implies a chronology in which Kui separates first from the rest of the stock, and then the general loss of transition suffixes as a living mechanism takes place and there is a generalization of meaning over the mixture of forms with and without reflexes of the transition suffixes. The development 'give' > 'bring' in Telugu alone does not allow any inference as to the chronology of the separation of this language from the others; the development probably took place within Telugu itself, perhaps aided somehow by the similar development in the verb **ta-* in the ancestors of Gondi and Kolami, perhaps independently. Certainly the period between the mention by the Chinese traveler Hsüan-tsang (Yuan-chwang; 630-45 A.D.) of the separate language of the Andhras³⁰ and the earliest extant work in the Telugu language in the 11th century A.D. is long enough to allow this development.

The Brahui forms of this verb all go back to *tir-* (cf. §§22, 26) except possibly the past stem *tiss-*, for which the same things must be said that will be said for *bass-* in §24a. The negative stems *ti-t-* and *ti-f-*, like *ba-t-* and *ba-f-*, imply *tir-* (< **ti-r-*; §22); the verb 'bring' has *hatip-* with *p* instead of *f*, probably on the

³⁰ I think that there can be no doubt that the language indicated is Telugu, the Andhras being one of the two great political divisions of speakers of Telugu. It is at least possible that the Andhras were already speakers of Telugu at the times of all the earlier references to them, the earliest being in the Aitareya-Brāhmaṇa (see V. A. Smith, ZDMG 56.649 ff., for a conspectus of the early references). This would put Telugu as a separate language back to the first half of the first millennium B.C., which is in itself not improbable since Tamil literature as recorded begins in the very early A.D. period.

It would be a distinct advance in our knowledge of linguistic conditions in very early India if we could make some further inference about the period of the separation of Brahui from the other languages than we have been able to do in §22b, but I cannot see a way to it on the basis of the material handled in this paper.

model of the great majority of the verbs in the language. It is to be noted that no imperative is found from this verb in Brahui.

Our reconstruction of Proto-Dravidian sets up four verbs meaning 'give', namely **ta-*; the verb represented by Telugu *te-*, Brahui *tir-*, Kolami *si-*, etc.; that represented by Telugu and South Dravidian *i-*, Brahui *e-*; and that represented by South Dravidian **koṭu-*, Kolami *ko-*, *kor-*, etc.³¹ Undoubtedly there were some differences in shade of meaning, but these have not yet been found.³² Most of the languages lost one or more of the verbs, or preserved two with different meanings (e.g. Telugu *i-* 'give' and *te-* 'bring'; Malayalam, Kota, and Toda **ta-* 'give to 1st or 2nd person' and **koṭu-* 'give to 3rd person'; Kui *ta-* 'bring' and *si-* 'give'); or, like Brahui, produced a complicatedly suppletive verb from *ti-* and *e-* and, in one dialect, *ta-*, and used *ti-* and *ta-* as second members of a compound stem. Literary Tamil seems to have preserved three of the verbs, *ta-*, *i-*, and *koṭu-*, all meaning 'give,' but probably no colloquial dialect of Tamil does so, and we need an exact statement of the historical developments in the literary dialect or dialects.

24. The positive stems with short *a*, except *var-* and *tar-*.

(a) It would seem at first sight that all the languages except Kui (*va-*), Gondi (*va-*, with a questionable *va-*), Tulu, Oraon, and Malto (only *var-*), provide evidence for a stem **va-*. All the South Dravidian languages have a past stem **vand-*; Kolami has *vatt-*, Brahui *bass-*. In addition, Kota has *va-* in future, voluntative, and some other forms; Toda has *pa-* in desiderative and dubitative; Telugu has *va-* in *vatt-*, *vast-*, *vacc-* (*vatsts-*); Kolami has *va-* in present-future, the gerunds, and one of the future stems, and in the imperative 2pl. *va-r*. (The Brahui negative stem *ba-*, as we have seen above in §22a, is not evidence for **va-*, but by implication for a stem with *-r*-, presumably **va r-*.)

It is evident, however, that in all these instances except one, **va-* is followed by a consonant. The one exception is the present-future tense and the gerund of continuous action of Kolami; in these, as was pointed out in §9a, *va-* is followed immediately by a vowel (e.g. *vaatun*, *vaa*), and there seems to be no possibility historically of anything but a stem **va-* here.

In all those cases where **va-* is followed by a consonant, there is a possibility that the stem was really **var-* and that the consonant or consonant cluster represents **rC(C)-*. So Tuttle for Telugu: '*vacci* < **warci* HAVING COME', with the comment that 's stands for *c* between vowels: the suffix of *cēsi* <

³¹ Tuttle's attempt in AJP 50.152-4 to carry the first three of these verbs back to a common origin deals with a period previous to the Proto-Dravidian that I have set up in this paper, for which, I think, we have no evidence. I find the attempt as little convincing as L. V. Ramaswami Aiyar did a part of it in Journal of Oriental Research, Madras 4.63, fn. 1. On the other hand, I do not find the latter scholar convincing in his attempt to connect **ta-* and *te-/ti-* (ib. 62).

³² Ramaswami Aiyar (ib. 62, fn. 1) says: 'The form *tā* generally means the idea of *leading something to another and making that other possess it*; while *sī* stresses, in the contexts in which it is employed, only *the idea of anything being parted with by the possessor*.' This is in part an attempt to unite in the one word the two meanings 'bring' and 'give'; I am convinced that my hypothesis for **ta-* and its development of meaning gives a better historical picture.

**kiēci* HAVING DONE corresponds to that of *vacci* ...' (Dravidian Developments 19, §29). Again, L. V. Ramaswami Aiyar: 'Telugu *vatsu* [sic!] contains the affix *r* absorbed within the suffix *su*' (Journal of Oriental Research, Madras 4.61). The Kannada grammarians teach that the past gerund *bandu* is formed from *bar-* with a change of *r* > *n* before the dental suffix (so F. Kittel, A Grammar of the Kannada Language 97; A. N. Narasimha, A Grammar of the Oldest Kannarese Inscriptions 199).

In fact, in none of the literary languages (Tamil, Malayalam, Kannada, Telugu) is there any record of the pertinent forms from this stem (or from **ta-* or Telugu *te-*) with *r* appearing before a consonant.

In words where *r* really existed, Old Kannada has forms with *r* plus consonant, which are in general replaced by modern forms without *r*; e.g. *ir-* 'be' with past stem in Old Kannada *ird-*, in Middle and New Kannada *idd-*. But *bandu* (*vandu*) is the only form appearing in the records. The grammarians' statement just quoted does not mean that there is recorded for Kannada a form **bardu* (or **barndu*); it is only a method of deriving *bandu* from the stem *bar-*, which is the only one posited for the verb by the Kannada grammarians, in other words, a descriptive statement, not an historical one.

In Tamil, *r* before consonants remains in the literary language of all periods; e.g. the root *ce-r-* 'join (transitive)' has present stem *ce-rkk-*, future stem *ce-rpp-*, past stem *ce-rtt-*; *va-lar-* 'grow' has past stem *va-larnt-*. Similarly in Malayalam. Consequently, if *vant-* were for **varnt-*, the latter should be at least recorded (we would expect it to be used in the literary language of all periods); but it is not found at any period of the two languages.

Already in pre-Telugu, there occurred many cases of simplification of *r* plus consonant, so that we find such equivalences as Tamil *neruppu* 'fire' : Telugu *nippu*, Tamil *erutu* 'bull' : Telugu *eddu*. Other occurrences either were not simplified or were re-formed by analogy, so that we find, in the grammars at least, such verb-forms as *mar-ci*, *mar-cu*, *mar-tunu*. If the forms with *va-* followed by consonant originally had *r*, they either should still retain it (or they should have retained it in Old Telugu records), or they lost it in the pre-Telugu period. The first alternative is incorrect; there is no form recorded with *r* (so far as I can find). The second alternative is certainly a possibility which there is no way of disproving. However, it is not necessary to assume that *vacci* is from **varci* as Tuttle does, on the ground that 's stands for *c* between vowels', and that consequently *c* or *cc* between vowels MUST be derived from **Cc*. It undoubtedly is so derived in *cu-ci* 'having seen'. But the root *i-* 'give' has *icci*, and *ca-* 'die' has *cacci*; it can hardly be argued that *-cc-* in these is due to a lost consonant. It seems that between vowels, the first of which is SHORT and accented, we find not *s*, but *cc*, in this form. And similarly for the other Telugu forms; *r* is not necessary at an earlier stage for the present phenomena. The stems in question then are not really conclusive one way or the other, and may be interpreted either way.

The Kota forms with *va-* are not conclusive. In all of them *r* might have been the first element in a cluster which was simplified as in Kannada; cf. Kannada *akki* 'husked grain, especially rice', Kota *aky*, both < **arki* : Tamil *arici* (T.

Burrow, BSOS 11.130 bottom; J. Bloch, BSL 25.14); Kota *a-r-* 'call' with second stem *a-t-* < **a-rt-* : Tamil *a-r-* 'shout, roar' with past stem *a-rtt-*; Kota *če-r-* 'join (intransitive)' with second stem *če-d-* < **če-rnt-* : Tamil *ce-r-* with past stem *ce-rnt-*. The numerous cases in which Kota has *-rk-* come from South Dravidian **rVk(k)-*; e.g. Kota *tirk-*, *tirky-* 'turn (transitive)' : Tamil *tirikk-*. We should expect in the verb *va-* that **rkk-* would become Kota *-k-*; but we must not argue that Kota *-k-* necessarily represents **rkk-*. The form *vave-ro* 'must come' may show a clear case of *va-*; but I have not been able so far to find examples of South Dravidian **-rv-* in Kota. The evidence then is not conclusive either for or against **va-* as opposed to **var-*.

In Toda, on the other hand, the cluster **-rk(k)-*, as well as **-rVk(k)-*, was preserved either as *šk* or as *šk*, the conditions for the divergent development not yet being evident; e.g. Toda *pušk* 'kidney' : Tamil *pirukkam* (< Sanskrit *vrkka-*); Toda *tušk* 'man's hair-curl' : Tamil *curuḷ-* 'become rolled, curled,' *curuḷt-* 'to roll, curl'; Toda *aškj* 'husked grain' < **arki* : Tamil *arici*, Kannada *akki*, Kota *aky*.³³ The Toda voluntative *paškin* is therefore from the stem **var-*, since parallel forms in other verbs have no sibilant suffix (e.g. *kɣuɣ-kin*). The desiderative (1sg. *pašepini*) and dubitative (1sg. *pašpini*) apparently have stem *pa-* < **va-*, since other verbs have parallel forms with sibilant suffixes.

The Coorg past stem *band-* is in the same situation as the New Kannada stem. Here we have no literary records to assure us that Coorg had no *r* in the form. We must judge it to be ambiguous.

The Kolami forms not already treated are the past *vatt-*, future *vad-*, and past gerund *vat*. The comparative study of this language has not yet gone far enough to allow a clear decision about the stem here. Certainly, such clusters as *-rt-* and *-rd-* occur; e.g. the past gerund of *ti-r-* 'be finished' is *ti-rt*, the future stem *ti-rd-*. But it is fairly certain that this corresponds to a South Dravidian **-rVC-* rather than **-rC-*; for the latter no certain cases are yet at hand. The Kolami forms are inconclusive, but Kolami certainly has *va-* (see above), and these also may quite well represent the same stem.

Finally, the Brahui past stem *bass-* may be from *ba-s-*, as was suggested with hesitation in §10a, i.e. from **va-t-*. However, L. V. Ramaswami Aiyar (Journal of Oriental Research 4.59, Madras; Journal of the Bihar and Orissa Research Society 15.121) has suggested that the past tense stem of the verb 'be', *ass-*, is from **ar-t-*, *-t-* being cognate with the South Dravidian dental suffix of the past tense and the stem **ar-* being cognate with South Dravidian *ir-*. This is far from impossible; if it is accepted, then *bass-* is from **var-t-* rather than **va-t-*. Again an inconclusive result.

For this verb, then, the stem **va-*, without transition suffix and in positive forms, occurs certainly, as we found in §20a, in the imperative 2sg. in Kui and Brahui (and probably in the imperative 2pl. in Kolami). It also occurs certainly

³³ This is paralleled by developments with *t* and *v*. Cf. Toda *oʃf-*, *oʃt-* 'to dance' : Tamil *a-r-*, *a-rtt-* 'shout, roar', Kota *a-r-*, *a-t-* 'call'; Toda *iʃf-*, *iʃt-* 'drag' : Tamil *i-r-*, *i-rtt-*; Toda *kaʃtk* 'Pleiades' : Tamil *ka-rttikai*; Toda *ušt-*, *uštj-* 'appear' : Tamil *uru-*, *urutt-* 'appear, come into existence'. Toda *ešt* 'bull' : Tamil *erutu*, Telugu *eddu* < **erdu* < **erutu*, Kota *et*, is perhaps not an example of **rt* > *št*, but of **ʃt* > *št*, since Old Kannada has *ertu* > Old Kannada *ertu* > New Kannada *ettu* (*ʃ* here is the retroflex fricative).

in the stems listed at the beginning of this section in Tamil, Malayalam, and Kannada, and also in a few Kolami forms and in all probability in the Toda desiderative and dubitative. For all the other stems listed there, those of Telugu, Kota, and Coorg, the Brahui past stem and the remaining Kolami stems, the evidence is inconclusive, with at least a possibility that **va-* is the stem in question rather than **var-* (for Kota, see a somewhat theoretical argument for **var-* towards the end of §26a).

(b) The same results emerge for the verb **ta-*, in Tamil, Malayalam, Kannada, Coorg, Kota, Toda, and Telugu (barring the vowel quality *e*).

Kolami has no forms of this verb, except those discussed as imperative forms (§§9b, 20b).

The Gondi *tat(t)-* was considered in §21b to be probably closely related to the Kui verb *ta-* with the suffix *-t-* between the stem and the transition suffixes. If so, this is a clear case of **ta-*. If, on the other hand, Gondi *-t-* should be related to the dental suffix of the South Dravidian second stem, there is the possibility that we have rather **tar-t-*. This is an inconclusive case.

Brahui has no past tenses for this verb. It shows **ta-* in a few irregular forms of *hata-* 'bring' and in a few dialectal forms of the verb 'give' (§10b). Its forms are a clear case of **ta-*.

25. The Coorg 3rd persons of the past tense of these verbs, *ba'tu* and *ta'tu*, are unparalleled in South Dravidian. If they are what they seem (and there is, so far as I can see, no ground for incredulity), they are from the stems *ba-* and *ta-* with the 3rd personal ending *-tu*. The stems are from **va-a-* and **ta-a-*, i.e. they contain the positive transition suffix. Outside of the imperative, these are the only forms in all extra-Kui Dravidian except Gondi (§21) with the suffix. Coorg is not usually so archaic as this in comparison with other South Dravidian languages. One could rationalize the retention on semantic grounds: the forms meaning 'he/they came' and 'he/they gave' must in the great majority of all utterances have had a 1st personal indirect object.

26. The remaining stems are **var-* and **tar-* in positive forms, where, according to the Proto-Dravidian reconstruction in §17, *-r-* is not historically justified.

(a) The South Dravidian languages, Tamil, Malayalam, Kannada, and Coorg, have **var-* everywhere in the positive except the imperative and the past tense; Malayalam has it even in some imperative forms, and so also Kannada (fn. 7). Of the other two South Dravidian languages, Kota does not have a clear case of **var-* anywhere in its whole system; the future and voluntative *va-* may possibly represent **var-* (§24a, and see below). Toda apparently clearly has **var-* in its voluntative stem *paš-* and possibly has it in its desiderative and dubitative.

Telugu may possibly have **var-* rather than **va-* in its stems *vatt-*, *vast-*, *vacc-* (*vatsts-*) (§24a); it certainly has it historically in its infinitive and imperative forms with initial *r-*.

Kolami has an alternative future stem *var-*; its past *vatt-*, future *vad-*, and past gerund *vat* may possibly represent **var-* rather than **va-* (§24a).

Brahui has *bar-* everywhere in the positive, except possibly in its past stem *bass-* (§24a); it has *bar* as an alternative form to *ba* in the imperative 2sg.

Tulu, Oraon, and Malto use the stem *bar-* throughout the verb, which in Oraon is only positive.

Gondi has *var-* < **var-* as its imperative stem.

All these uses of the stem **var-* must, according to our reconstruction, be secondary, with the short vowel based on the stem **va-*, and *-r-* based on the *-r-* of the negative stem **va-r-*. That *-r-* of the negative should have found a place in positive forms is not strange, once the transition suffixes as a living mechanism were lost. The regular Dravidian verb is based on one stem, alike for negative and positive, including the imperative; the second stem of South Dravidian is originally confined to the past forms only. An irregular verb, therefore, was likely to suffer analogical re-formation. All the languages (exclusive of Kui) have this new stem **var-*, though not all have it throughout the same extent of the verb system. We must consequently date the formation of the stem in the period of unity of all the Dravidian languages except Kui, which was postulated in §22 on other grounds. Just which forms of the verb system were based on **var-* in this period, it is at present, I think, impossible to decide. Certainly, however, it did not get into the imperative at that time, since both **va-* and **va* survive in widely separated languages (§20a). If we should decide that the doubtful **va-* forms of the positive (§24a) are really from **va-* rather than **var-*, we shall have to say that there remained a nucleus of positive forms which **var-* did not invade in this early period. Is it possible that at this time consonant clusters were even more restricted in occurrence than they are in literary Tamil, and that in consequence **var-* could be used only with suffixes beginning with a vowel, while **va-* retained its place before suffixes beginning with a consonant? This is probably too facile, however; Kolami still has forms from *va-* followed by a vowel.

After the split into the historic languages, each language or group of languages went its own way, with the drift of development being towards complete invasion of the positive verb system by **var-*; the regularizing replacement of the negative stem **va-r-* by **var-* may be due to a carrying of the new positive stem back into the negative, or in some cases may owe more to the stem **va-* and non-*r* forms derived from it.

Complete carrying-through of **var-* into every form of the language was the final result in Tulu, Oraon, and Malto. In Brahui the whole of the system except imperative and possibly the past tenses came to be based on **var-*, with *bar* as an alternative form in the imperative. In Telugu **var-* is at the base of all forms except possibly the positive forms beginning with *va-*. In Kolami one future stem is *var-*, and possibly also the past *vatt-*, the past gerund *vat*, and the other future stem *vad-* are based on *var-*; it is hardly certain whether the positive stem *var-* or the well-attested positive stem *va-* had more weight in creating the negative stem *var-* in this language. In the South Dravidian languages the positive forms except the past and the imperative were based on **var-*; it is probable that the general uniformity of these languages should make us theoretically resolve the doubt about the Kota future and voluntative and other forms in favor of **var-*. Tamil, Malayalam, and Kannada all show within their recorded history replacement of negative *va-r-* by *var-*, and Coorg with its negative stem *bar-*

is undoubtedly a representative of the same process; Kota and Toda are archaic in their negative stems.

Gondi use of the stem **var-* as imperative alone is *sui generis*. It is undoubtedly of the same origin as in the other extra-Kui languages, but we probably have to posit an early separation from the group and a long isolated development in order to obtain Gondi's peculiar distribution (cf. §21a).

(b) *Mutatis mutandis*, the same things are to be said for **tar-* as for **var-*.

Only Telugu stands outside the picture for this verb. There is no **ter-*, except possibly in those forms belonging in §24b. There was on the contrary a slight tendency for the negative stem *ter-* to invade the positive, seen in the classical infinitive and imperative, and then a cessation of this tendency and an invasion of the negative by *te-*, based on the imperative (§22b).

27. The Kui transition suffixes have been said to be not identical with those of Proto-Dravidian, but reflexes of them (§16).

The negative suffix with its two forms *-ara-* and *-aja-* needs some comment. Winfield says (104) that the second is 'as commonly used' as the first. This should mean that they coexist in one dialect.

We know that both *r* and *ɾ* of some South Dravidian and Telugu words (with *r* in the corresponding Gondi words) are represented by Kui *s* and *j*; I give a few examples.

Kui *tija* 'to turn back, return' : South Dravidian and Telugu **tiri-*, Gondi (T.) *ṭiritānā* 'revolve (of bullocks threshing or in oilmill); wander', Kolami *tirg-*, *tirkt-* 'to turn (intransitive), wander', Oraon *kirna* 'to return, turn (intransitive)',³⁴

Kui *e:su* 'water', Kuvi *e:ju* 'water' : Tamil *i:r*, *i:ram* 'moisture', Malayalam *i:ram*, Kannada *i:ra*, Gondi *e:r* 'water', Kolami *i:r* 'water'; so L. V. Ramaswami Aiyar, *Indian Historical Quarterly* 10.37-47. T. Burrow, BSOS 11.346, however, connects Kui *e:su* rather with Tamil *ya:ru*, *a:ru* 'river', Malayalam *a:ru*, Telugu *e:ru*, Gondi *ye:r* 'water', *aṭ-ya:r* 'boiling water'. Gondi *ye:r* is probably to be interpreted phonemically as *e:r*, as Ramaswami Aiyar has done.

Kui *mi:ja* 'to exceed, excell, surpass' : South Dravidian and Telugu **mi:ru-*.

Kui *kujgu* and *kuj* 'thigh', pl. *kuska* : Tamil *kuṛaṅku*, Malayalam *kuṛaku*, Telugu *kuṛuvu*, Gondi *kurki*, Kuvi *kudgu*, Kolami *kudg-* (sg. *kudug*, pl. *kudgul*), Malto *qosge*, Oraon *kḥosga*.

Whatever is the reason for this development in Kui, in contrast with the majority of cases of **r* and **ɾ* corresponding to Kui *r*,³⁵ we must, I think, accept

³⁴ Bray 2 thinks of Brahui *taring* 'to spin (thread)' as cognate; but Tuttle (JAOS 56.359) says: 'Rather Balūchi *tar-* "turn"', and, in fact, it is general Dravidian *e* that is represented by *a* in Brahui, not *i*. Bray 2 also, with a query, suggests as cognate *sirring* 'to recoil', but this also seems unlikely.

³⁵ T. Burrow, in BSOS 11.346, sets up Proto-Dravidian *-s-* (*-z-*) for those words with South Dravidian and Telugu *ɾ*, but Oraon-Malto and Kui *s* (with further development within Kui to *j*). He neglects the cases with South Dravidian and Telugu *r* (namely my first two examples; I have no others to present at the moment), apparently intending by his treatment of Kui *e:su* to remove it from this group, and presumably to rule out a similar statement for South Dravidian and Telugu *r*. If we are left with Kui *tija* alone, it must be noticed that Oraon has here *r*, if the etymology is correct for the Oraon word. The Kui *tija* does, however, seem to be similar to the cases with *ɾ*. For the moment I cannot discuss this problem further.

the Kui suffixes *-ara-* and *-aja-* as being genetically connected, the former being prior to the latter; how it happens that *r* and *j* coexist, I cannot explain.

In those few forms in the positive where *-ara-* and *-aja-* appear (§15), we must see a spread of the suffixes from negative forms.

28. The other Brahui verbs with *r* in some forms (Bray 1.150-6) cannot be discussed historically in this paper, since for most of them detailed phonological investigations must be made, and preliminary study of them does not make it seem probable that the *r* is of the same origin as in the verbs discussed above. It should be said also that the unpublished material on Kolami has one verb parallel to one of the Brahui verbs.

ENGLISH LOAN-WORDS IN MICRONESIAN LANGUAGES

ROBERT A. HALL JR.

BROWN UNIVERSITY

During the 19th century, English was extensively used in Micronesia (the Carolines, Marshalls, and Gilberts) as the language of traders and missionaries. The former used primarily a sub-standard, pidginized English; their activity and linguistic influence lasted chiefly from the early part of the century through the 1890's.¹ American missionary work began in the 1850's and 1860's, and lasted in some regions (Kusaie, the Marshalls) into the period of Japanese administration;² the missionaries naturally used and tended to spread standard English. After the Carolines and Marshalls became German colonies, the German authorities did not encourage the use of Pidgin English, or establish it as an official lingua franca, as was done in New Guinea and the Bismarcks and Solomons; in fact, at least some effort was made to discourage its use.³ In the period of Japanese occupation, efforts were made to spread the use of Japanese as a lingua franca,⁴ and apparently Pidgin English has fallen into desuetude. Through missionary teaching of English, a few natives on almost every island in the Marshalls, and presumably in other island groups as well, know some standard English.

In the vocabularies of the Micronesian languages, however, evidence of earlier use of English has remained in the form of loan-words.⁵ It is the purpose of this

¹ The use of Pidgin in this area during the 19th century is attested in scattered references and quotations in travelers' reports, such as F. Christian, *The Caroline Islands* (London, 1899). For general references concerning the use of English in pidginized form in the South Seas, cf. the chapter 'Beach-la-Mar' in J. E. Reinecke, *Marginal Languages 727-71* (Yale University dissertation, 1937).

² The historical data on which this and other statements in this paper are based are given in the volumes of the report of the Südsee-Expedition 1908-1910 (cf. below, fn. 5, for detailed listing), in Christian, *op.cit.*, and in T. Yanaihara, *Pacific Islands under Japanese Mandate* (New York, 1940).

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³ Cf. *Denkschrift über die Entwicklung der Schutzgebiete in Afrika und der Südsee, 1906/07, in Verhandlungen des Reichstags, XII. Legislaturperiode, I. Session, vol. 245* (Berlin, 1908): Anlagen zu den stenographischen Berichten, no. 622, no. 4117-26, Appendix E II, p. 4137.

⁴ Cf. Yanaihara, *op.cit.* 244.

⁵ The linguistic material has been obtained from the following sources:

The volumes entitled *Ergebnisse der Südsee-Expedition 1908-1910*, edited by G. Thiele-
nius, Hamburg, 1917 ff., including the following:

Series I: Allgemeines. Tagebuch der Expedition. 1927.

Series II.B, volumes II. W. Müller: Yap (1918; 2 vols.); III. A. Krämer: Palau (1917-19-26-29; 5 vols.); IV. E. Sarfert: Kusaie (1919; 2 vols.); V. A. Krämer: Truk (1932); VI. A. Krämer (vol. i); H. Damm, P. Hambruch, and E. Sarfert (vol. ii): Inseln um Truk (1935; 2 vols.); VII. P. Hambruch: Ponape (1932-36; 3 vols.); VIII. A. Eilers: Inseln um Ponape (1934); IX. A. Eilers: Westkarolinen (1935-36); X. A. Krämer: Zentralkarolinen (1937-38; 2 vols.); XI. A. Krämer and H. Nevermann: Ralik-Ratak (Marshall-Inseln) (1938).

note to give an etymological list of these loan-words, so far as they are attested in the available materials,⁶ and then to discuss briefly the linguistic aspects of the borrowings.

1. ETYMOLOGICAL LIST. The English etyma are given first, followed by the borrowings in the native languages.⁷

alligator: Tr * <i>[æligeta]</i> (Bollig 88, <i>alligator</i>)	bag: Ma <i>bāg</i> ; Pa <i>beg</i>
almanac: Ma <i>dlmanak</i>	bark: Ma <i>bark</i>
anchor: Ma <i>anka</i>	bean: Ma <i>bin</i>
April: Ma <i>epril</i>	bed: Ma <i>bād</i> , <i>bett</i> (< Ger. <i>Bett?</i>); Po <i>pet</i>
August: Ma <i>okodj</i> ; Tr <i>ogus</i>	bell: Ma <i>bell</i>

Also the following material:

A. Erdland: Die Marshall-Insulaner. Münster, 1914. (Anthropos Ethnologische Bibliothek [AEB] 1.1.)

A. Erdland: Wörterbuch und Grammatik der Marshall-Sprache, Archiv für das Studium deutscher Kolonialsprachen 4.1-247 (1906).

A. Senfft: Wörterverzeichnis der Sprache der Marshall-Insulaner, Zeitschrift für afrikanische und ozeanische Sprachen 5.79-157 (1900).

L. Gulick: A vocabulary of the Ponape dialect, JAOS 10.1-109 (1871).

M. Girschner: Grammatik der Ponape-Sprache, Mitteilungen des Seminars für Orientalische Sprachen zu Berlin (Ostasiatische Studien) (MSOS) 9.73-126 (1906).

J. Kubary: Beitrag zur Kenntnis der Nukuoro- oder Monteverde-Inseln, Mitteilungen der geographischen Gesellschaft zu Hamburg, vol. 16 (1900).

L. Bollig: Die Bewohner der Truk-Inseln. Münster, 1927. (AEB 3.1.)

S. Walleser: Grammatik der Palausprache, MSOS 14.121-232 (1911).

S. Walleser: Palau Wörterbuch. Hongkong, 1913; 2 vols.

⁶ Naturally, this list cannot claim to be complete or exhaustive. In the first place, some of the words may have gone out of use or may have been replaced by Japanese words in the years since 1915. Furthermore, the compilers of the vocabularies varied widely in the extent to which they paid attention to innovations such as English borrowings. This is exemplified strikingly in the two Marshall vocabularies of Erdland and Senfft. Erdland, a missionary interested chiefly in discovering relics of the older culture and preserving archaic native words, gives about eight or ten English loan-words; Senfft, a district official who simply recorded what he heard in every-day speech, lists well over a hundred.

The languages of the Gilbert Islands have not been included in this discussion, as material on them was not available. Their cultural contact with English speakers has been much more intense (the islands were claimed as protectorates by Great Britain in 1892), and the influence of English has probably been much stronger than in the rest of Micronesia.

⁷ The abbreviations used in referring to the various languages are: Ka = Kapingamarangi; Ku = Kusaie; Ma = Marshall; Me = Merir; Mo = Mokil; N = Nukuoro; Nga = Ngatik; Ngu = Ngulu; Pa = Palau; Pi = Pingelap; Po = Ponape; Pu = Pur; O = Onoun; S = Songosor; To = Tobl; Tr = Truk; Y = Yap.

The transcriptions used are those given in the various sources; they are in general based on the Lepsius alphabet, which was widely used in transcribing German colonial languages. The symbol *ä* represents [æ]; *j*, *dj* or *tj* represents [tʃ] or [dʒ]. In general, there is no phonemic contrast between voiced and unvoiced consonants, the former occurring intervocalically and the latter in other positions, although European observers noted these variants more or less haphazardly. In some words, the graph *ei* probably stands for [ai], under the influence of standard German orthography: thus in Tr *keikei* 'food', Ma *wein* 'wine'.

Certain words of Polynesian or other origin (*kaikai*, *kanaka*, *papaya*, *tainam*) are included under the English etyma, as they probably entered the Micronesian languages through Pidgin English.

- blankets: Po *pelānkěj*
 blue: Ma *blū* 'dark blue'
 boat: Ma *bōdj*; Po *pot*; Pa *bos*
 book: Ma *buk*; Po *puk* 'book, Bible';
 Tr *puk*
 bo'sun: Ma *bōjen* 'Bootsmann'
 bottle: Ma *bado*; Po *pótel*
 box: Ma *bákedj*; Po *pokij* 'box, chest'
 bread: Ma *brēdj* 'bread, biscuit'
 brig: Ma *brigg*, *brik*
 broom: Ma *brūm*
 brush: Ma *brōdj*
 bucket: Po *pōkit*
 bunk: Po *pānk* 'raised bed-place'
 button: Ma *badin* (n), *bóten-i* (v)
 'to button [it]'
 cake: Ma *kēk*
 calaboose: Ma *kalabūdj*; Pa *kalabūs*
 captain: Po *kápin*
 car: Ma *kar*
 card: Ma *kād*
 cards: Ma *kādj*
 carpenter: Ma *karpenta*
 cat: Ma *kudj* (?); Po *kat*
 catch (n): Ma *kādj* 'hook'
 Catholic: Tr *katolik*
 chain: Ma *djēn*
 chair: Ma *djēa*; Po *jēr*
 chalk: Ma *jók*
 checker-board: Ma *djékabot* 'checkers'
 China: Ma *ri-jina* 'man from China,
 Chinese'
 chisel: Ma *djēdi* (?)
 church: Ma *djerr*, *jer*
 cigar: Ma *djika*
 clock: Ma, Po, Tr *klok*; Pa *klok* 'clock,
 hour'
 club: Ma *klōb*
 coffee: Ma *kowi*
 collar: Ma *kállar*
 comb: Ma *kūm*
 compass: Ma *kómbodj*
 cook: Ma *kūk*; Po *kuk*
 copper: Ma *kópa*
 corn: Ma *korn*; Po *kōn*
 cow: Ma *kau* 'ox, cow'; Po *kau*
 'beef'; Tr *kau*
 cup: Ma *kop*
 December: Tr *disember*
 diploma: Ma *diploma* 'Zeugnis'
 dirt: Ma *djört*
 dog: Mo *dōg*
 dollar: Ma *dala* 'dollar; silver'
 duck: Ma *drak*, *dag*
 Easter: Ma *ijter*
 English: Ma *inglidj*
 February: Ma *bābwörē*; Tr *fēbuari*
 fig: Ma *big*
 flag: Ma *plāg*
 flour: Ma *plaua* -er, Pa *blaudn* 'flour,
 bread'
 fork: Ma *bork*; Po *pork*
 French: Ma *prāndj*
 Friday: Ma *braidé*
 German: Tr *sermen*
 Germany: Ma *djermani*
 glass: Ma *gladj*, *glas*; Po *klaj*
 goat: Ma *kōt*
 gold: Ma *gōl*; Y *gōl*
 good morning: Ma *gutmónin* 'hand-
 shake, greeting'
 grease: Ma *lāmp grīdj* 'wax candle'
 grog: Po *k(e)rok*
 ham: Ma *ām*
 hammer: Ma *āma*
 handkerchief: Ma *ānkajip*
 heave to: Ma *ībdu*
 horse: Ma *ōrdj*; Pa *os*
 hour: Ma *aua*
 ink: Ma *īnik*
 Irish potato: Ku *airiš potéto*
 iron (n, vb): Ma *aien*
 iron pot: Ma *āinpót*; Po *āimpót*
 jacket: Po *jákit*
 January: Ma *djanōre*; Tr *sānuari*
 June: Ma *djun*; Tr *sūn*
 July: Ma *djulai*; Tr *sulēi*
 kaikai 'food'; Tr *keikei*
 kanaka: Ma *kānakamān* 'falsch, -er
 Mann'; Tr *kanaka*
 kerosene: Po *kerajin*

- knife: Ma *neip* 'pocket knife'; Po *naip*; Tr *naif*
 lamp: Ma *lamp*; Po *la*mp*
 lantern: Ma *lánten*
 laplap (lavalava) 'loin-cloth': So *lavelap*
 lemon: Po *lémon*
 letter: Ma *letta* 'letter, anything written'; Po *lete*
 lime: Ku *láim*
 line: Ma *lein*
 lion: Tr *laion*
 machine: Ma, Po *mejin* 'sewing machine'⁸
 man o' war: Ma *man o war*
 mango: Ku *māno*
 marry: Ma *mārry*, *mare*
 Marshall (Islands): Tr *marsal*
 matches: Ma *mājet*; Po *matjej*; Pa *māses*
 May: Ma *mai* (or < Ger. *Mai*?); Tr *méi*
 milk: Ma *milk*
 minute: Ma *mínut*
 March: Tr *mas*
 money: Ma *máni*; Po *móni*; Ku **[mani]* (Sarfert 218 'money')
 Monday: Ma *mondre*
 monkey: Ma *monki*
 necktie: Ma *nāktai*
 New Guinea: Tr *nukuni*
 November: Tr *nowember*
 October: Tr *oktober*
 onion: Ku *ánion*
 papa: So, Pu, Me *pápa*
 papaya: So *uauái*; Y *vāvái*
 paper: Ma *pepa*; Po *pēper*
 pearl: Ma *bōr(r)*, *pōr*
 pen: Ma *pān*, *been* ([be:n]?)
 pencil: Ma *péndjil*
 picture: Ma *pi(k)dja*
 pig: Ma *pig*; Po *pwik*; Ka *ti pig*, *pik*; N *pik*; Mo *piχ*, *puik*; Pi *puik*; Nga *puik*; Tr *pig*; So, Pu, Me, To *péik*
 pineapple: Po *pdinepel* (Gulick), *puai-naper* (Girschner); Ku *páināpel*; Tr *peineper*
 pipe: Po *paip*, Pa *paib*
 pispis, pee-pis 'urine': Mo *píspis*, Po *pīpis*
 plate: Po *plēt*
 poison: Ma *poijen* 'poison, millipede'
 policeman: Ma *polijmen*
 pot: Po *pot*
 potato: Ma *poteto*, Po *bateto*, Ku *potéto* 'sweet-potato'; Tr *poteto*
 pound: Ma *paun* (n), *páun-i* (v) 'to weigh [it]'
 powder: Ma, Po *pauta*
 Protestant: Po *perótestent*; Tr *próstent*
 pump: N *poam* (*[pəm])
 pumpkin: Po *pūmkīn*; Ku *pónkin*; O *pankin*; S, Me *pámugen*
 pussy: N *pusi* 'cat'
 razor: Ma *rejer*
 rice: Ma *rēidj*
 ring: Ma *riŋ*
 room: Ma *rūm*
 'rouse 'get out!' (or Ger. 'raus!): Ma *raudj*
 rum: Ma *ramm*
 Sabbath: Ma *djabbat(o)* 'Sunday' (*ran in djábat* 'Sabbath day')
 sailor: Ma *djela*
 salt: Ma *djal*
 Saturday: Ma *djédade*
 scaly: Ma *kéle* 'tinea imbricata (skin disease)'
 school: Ma *jekul*
 schooner: Ma *djēkuner*
 seal (animal): Ma *djil*
 September: Ma *djeblém̄ba*; Tr *sepetémber*
 sheep: Ma *djib*
 ship: Tr *sip*
 shirt: Po *jet*
 shoe(s): Po *jut*
 shot (ball): Ma *djōt*
 soap: Ma *djōb*
 soup: Ma *djūb*

⁸ [Cf. Japanese *mīšiñ* [míšiŋ] 'sewing machine' < Eng. *machine*.—BB].

soursop: Ku <i>sdusáp</i> ; Tr <i>sasaf</i> ; Y <i>sausádu</i>	towel: Ma <i>tdwel</i>
spell: Ma <i>djibál</i>	trousers: Ma <i>trádujer</i> ; Po <i>rauujij</i>
spoon: Ma <i>djébūn</i> ; Po <i>jupūn</i> ; Tr <i>supun</i>	Tuesday: Ma <i>djúde</i> , <i>júsdí</i>
steamer: Ma <i>dimer</i>	umbrella: Ma <i>ambrile</i> ; Po <i>amper</i>
stocking: Po <i>jtakin</i>	vinegar: Ma <i>winegar</i> , <i>wíneka</i>
sugar: Ma <i>djúka</i>	watch: Ma <i>wādj</i> ; Tr <i>wos</i>
table: Ma <i>tēbal</i> ; Po <i>tēpel</i> ; Pa <i>tēbel</i>	water-melon: Po <i>yater mēlon</i> ; Ku <i>wāter mēlon</i>
tainam 'mosquito-net': Ma <i>táinam</i>	watery: Ma <i>wáteri</i> , <i>waoteri</i> (*[wotəri])
tea: Ma <i>ti</i>	'halbroh, noch nicht gar'
tear: Po <i>i-ta're</i> 'I tear [it]'	Wednesday: Ma <i>wendjdē</i>
thimble: Ma <i>tumbal</i>	week: Ma <i>wík</i>
thousand: Ma <i>táusan</i>	wharf: Ma <i>waorp</i> (*[wɔrp])
thread: Ma <i>drēdj</i> ; Po <i>terēt</i>	window: Ma <i>wunda</i>
Thursday: Ma <i>daije</i>	wine (or Ger. Wein): Ma <i>wein</i> (*[wain])
tin: Po <i>tin</i> 'tin can'	yam: So, Pu, Me <i>íam</i>
tin pan: Ma <i>tinpān</i>	year: Ma <i>yia</i> ; Tr <i>ir</i>
tobacco: Ma <i>tabáke</i> , <i>tábáke</i>	

2. PHONETICS. The borrowings present the customary features of adaptation of foreign material to native phonetics. As most or all of the languages of this area have no phonemic contrast between voiced and unvoiced sounds (cf. fn. 7), the characters representing these sounds are frequently confused in European observers' transcriptions. In certain of the languages, especially Marshall, there are no fricatives or sibilants, and such sounds in the loan-words are replaced by the nearest corresponding sound; this is particularly true of Eng. *s*, replaced by Marshall *tj*, *dj*, as in *glass* > *gladj*, *spoon* > *djébūn*. Cf. also Eng. *fig* > Ma *big*, *fork* > Ma *bork* and Po *pork*, etc. Consonant clusters are often split up by intercalated vowels, as in Eng. *ink* > Ma *tnik*, *September* > Tr *sepētémber*; other such intercalations were probably made but masked by the observers' transcriptions of the clusters as such.

3. MORPHOLOGY. Most of the words borrowed are, as might be expected, nouns in English. Phonetic peculiarities show certain of the nouns to have been borrowed from English plurals: *blankets* > Po *pelānkēj*; *cards* > Ma *kādj* (beside *kād* < *card*); *trousers* > Po *rauujij*.

In the borrowing languages, the loan-words are of course adapted to the native morphology. Certain words appear with native verb inflection, e.g. Ma *bóten-i* 'to button [it]' and *páun-i* 'to weigh [it]' (< *pound*), or Po *i-ta're* 'I tear [it]'. Other words are used for derivatives, e.g. Ma *ri-jina* 'a man from China', with noun-forming prefix *ri-* (seen in *ri-nāna* 'evil person', from the verb *nāna* 'be bad', etc.).

4. SYNTACTIC FEATURES. These loan-words are of course used in native constructions to form further combinations, such as Ma *ran in djábat* 'day of the Sabbath', *riñ in máre* 'ring for marrying, wedding-ring', *dma in bél* 'hammer for a bell, clapper'. The characteristic Melanesian type of double-noun phrase (head plus attribute) is found in Ma *lāmp grídj* 'grease light, wax candle'.

5. SEMANTICS. For the most part, the words have kept their central English meaning in the native languages, as far as can be determined from the attestations. In a few cases, semantic shifts, especially extensions of meaning, have occurred, as in Ma *djekabot* 'checkers' < *checker-board*, Pa *klok* 'hour' < *clock*, Ma *plaua* and Pa *blaudn* 'flour, bread' < *flour*. Specialization of meaning is found in Ma *blū* 'dark blue', Ma *neip* 'pocket-knife' < *knife*, Ma and Po *mejīn* 'sewing-machine' < *machine*, Ma *kéle* 'tinea imbricata' < *scaly*, and Ma *wáteri* 'rare, not done' < *watery*. In the case of Ma *gutmónin* 'handshake, greeting' the action accompanying the words of greeting was taken to be their central meaning.

It will be noted that practically all of these words represent 19th-century cultural borrowings, either objects (*box, bread, button, cup, etc.*), activities ('weigh', *heave to, iron*), customs ('handshake', *marry*), or divisions of time (*hour, year*, names of days and months). The most widespread of these loan-words is *pig*, which occurs in almost all the Micronesian languages;⁹ this animal, introduced in the last century, is at present the most widespread of all domesticated animals in Micronesia.

6. GEOGRAPHICAL DISTRIBUTION. The greatest number of loan-words attested is in the Marshalls, and next to this in the eastern Carolines (Ponape, Kusaie, Truk); the western Carolines have the fewest borrowings. This distribution seems to correspond to the relative proximity of these islands to the source of the borrowings, and also to the fact that the Marshalls and eastern Carolines were more frequently visited by English-speaking traders and whalers, and later missionaries, than the islands farther west; but it may also be due to scantier attestations for the more westerly islands. The fact that certain words occur only in the Polynesian-speaking islands of Nukuoro and Kapingamarangi (*pump, pussy*) and others only in the extreme southwestern islands of Pur, Merir, and Songosor (*papa, yam*) would point to an independent source of borrowing for these islands.

⁹ Except only Yap and Palau, which have the Indonesian word for 'pig', in the forms *vavi* and *bábi* respectively.

NOTES

THOMAS A. KNOTT, professor of English in the University of Michigan and editor of the Middle English Dictionary, died in Ann Arbor on August 14 after an illness of several months. He had been a member of the Linguistic Society of America since 1926.

Professor Knott received his A.B. from Northwestern University in 1902, and his Ph.D. from the University of Chicago in 1912. He taught at Northwestern Academy (1901-2), the high school in Coshocton, Ohio (1902-3), Bradley Polytechnic Institute (1903-5), Northwestern University (1905-6), the normal school in Stevens Point, Wisconsin (1907), the University of Chicago (1907-20), and the State University of Iowa (1920-6). From 1926 to 1935 he was associated with G. & C. Merriam Company as general editor of Webster's New International Dictionary, Second Edition. In 1935 he joined the faculty of the University of Michigan, succeeding the late Samuel Moore as editor of the Middle English Dictionary.

In 1918 and 1919 he was a captain in the Military Intelligence Division of the General Staff.

He was co-author with Samuel Moore of *Elements of Old English* (1919, 9th ed. 1942), and with John S. Kenyon of *A Pronouncing Dictionary of American English* (1944). He also contributed numerous articles to scholarly journals, especially on Chaucer and on the Piers Plowman authorship controversy. His article *The Text of Sir Gawayne and the Green Knight*, *MLN* 30.102-8 (1915), first called attention to the fact that certain parts of this important Middle English poem which had been considered illegible in the unique manuscript could be recovered by reading the offsets on the pages opposite with the aid of a mirror.

Professor Knott was always willing to help younger colleagues and graduate students with suggestions about their work. Many a language student can recall entering upon a rewarding line of investigation because Professor Knott had mentioned in an informal conversation that he would like to know the answer to a certain question.

LESTER C. SHERMAN

THE LINGUISTIC CIRCLE OF NEW YORK announces the publication of the first number of its journal, *WORD*, dated April 1945. The journal is expected to appear three times a year. It will include as its field the entire science of linguistics, with special emphasis on the relation of linguistics to social, cultural, and psychological phenomena. *WORD* will carry articles, reviews, and notes on activities in the field of language and allied fields in America and elsewhere.

Subscription to *WORD* is three dollars a year; membership dues in the Linguistic Circle of New York are one dollar a year. Inquiries should be addressed to Wolf Leslau, École Libre des Hautes Études, 66 Fifth Avenue, New York 11, N. Y.

We are glad to welcome the new journal, and hope that it will prosper.

THE EDITOR has on hand a limited number of reprints of the article *Grammatical Categories*, by BENJAMIN LEE WHORF (*LANG.* 21.1-11). Members of the Society who would like to receive a reprint of this article are asked to communicate with the Editor.

PUBLICATIONS RECEIVED

We acknowledge here the receipt of such works as appear to bear on the scientific study of language. This acknowledgment is regarded as a full return for the presentation of the work; no book can be returned to the publisher. Reviews will be published as circumstances permit, and copies will be sent to the publishers of the works reviewed.

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OLD PERSIAN *artācā brazmaniya*

ROLAND G. KENT

UNIVERSITY OF PENNSYLVANIA

[In the Daiva Inscription of Xerxes, *artā-* is an instrumental coordinate with the preceding acc. *Auramazdām*; *br̥azmānīyā* is to be normalized *brazmaniya* on the evidence of the Elamite transcription, and is nom. sg. masc. 'prayerful, reverent' = Skt. *brahmayā-h* 'religious'. The clause means 'worship Ahuramazda and Arta reverent(ly)'. Previous views are listed with a critique.]

1. In LANG. 13.292-305 (1937), I discussed the Old Persian inscription found at Persepolis in 1935 by the Persepolis Expedition of the University of Chicago, in which Xerxes relates his suppression of the worship of *daiva*'s or false gods by rebels against his power. Four copies were found, all on stone tablets simulating clay tablets: an OP copy in 60 lines, preserved complete; another OP copy, preserved undamaged, but ending in the middle of line 51 (the writing of which was begun at the right, so that it is the beginning of line 51 which is lost); an Akkadian copy in 50 lines, preserved complete; an Elamite copy in 50 lines, of which lines 12-38 are preserved only in part. The OP copies are given in facsimile in my article, page 295, the complete OP copy and the Akk. and Elam. copies are given by Herzfeld in his *Altpersische Inschriften*, plates X-XI-XII. The actual reading of the tablets, in the preserved parts, is nowhere in doubt.

2. My purpose in again discussing this inscription is to revise my former treatment of a phrase occurring in lines 40-1, 51-2, 53-4, which has been subject to variant interpretation by successive scholars. In the first occurrence we have the statement that after the destruction of the sanctuaries of the *daiva*'s and the prohibition of their worship, 'where formerly the *daiva*'s were worshipped, *avadā adam auramazdam ayadaiy artācā br̥azmānīyā*, there I worshipped Ahuramazda . . . '—the last two words forming the crux. The other two passages have the same idiom with only a change in the verb form.

3. The earliest publication of the inscription did not give the original text, but only Herzfeld's translation: 'there I worshipped Ahuramazdā together with 'Rtam the exalted.' This appeared in *The New York Times* for Feb. 9, 1936, and in the *University of Chicago Magazine* 28.4.23-5 (Feb. 1936), and is quoted in my own article in *JAOS* 56.213 (1936); Herzfeld, writing in German in *Revue de l'Histoire des Religions* 113.21-41 (Jan.-Feb. 1936), translated with 'mit 'Rtam dem erhabenen'. He seems to have normalized *'rtācā brazmaniy*, as in his later articles, and—though he does not say so—to have taken *brazmaniy* as a derivative of the PIE root **bhergh-* 'to be high', from which come Avestan *barəz-* 'high', *barəzah-* 'mountain', *barəzan-* 'height' = OP instr. sg. *baršnā* 'by height', Av. *barəzant-* 'high' = Skt. *bṛhánt-*, etc.

4. Herzfeld shortly afterward published the complete original text of the inscription, in all three languages, in *Archaeologische Mitteilungen aus Iran* 8.56-77 (1937), translating our phrase by 'da verehrte ich Ahuramazda mit 'Rtam dem brazmanischen.' He normalized *'rtācā brazmanī* (my *artācā braz-*

*maniy*¹), and on page 69 gave his linguistic interpretation: *artācā* is a comitative instrumental with enclitic *-cā* 'and', and *brazmaniy*, which he declares to be the only normalization permitted by the Elamite transcription (but see §5), is instrumental of an adj. *brazmaniya-*, derivative to OP **brazman-* = Vedic Skt. *brāhman-* 'prayer'. His view is in error in regarding *brazmaniy* as an instrumental form to adj. *brazmaniya-*, since such an instrumental would have to end in *-yā*, and in requiring *brazmaniy* on the basis of the Elamite (see §5). But his interpretation of *artācā* is correct, as we shall see (§6).

5. With the OP text now available, Hans Hartmann in OLZ 40.145-60 (March, 1937) normalized *artācā brazmaniya*; he justifies *-niya* by comparing the Elamite transliteration ending in *-ni-ja* despite Akkadian *-ni-i* (both OP words are merely transliterated, not translated,² into the other two languages). His preference for agreement with the Elam. is supported by the transliterations found in this same inscription, as well as elsewhere, of OP *Haxāmanišiya* 'Achaemenian' by writings ending in Elam. *-ši-ja* and Akk. *-ši-*. He takes *artā* as ablative³ rather than instrumental, and *brahmaniya* as locative to a stem *brazman-*, with postpositive *-ā* (as is regular in OP locatives, with slight exceptions mentioned below). The *-cā* he takes as attached to the prior of the pair of nouns rather than in its usual position after the second; for this he quotes from the Gāthās of the Avesta: Yasna 43.4 *taxmēmčā*, 34.6 *yazəmnaščā*, 33.8 *amərə-tāščā*.⁴ He takes *arta-* as identical with Av. *aša-* 'Gerechtigkeit' and *brazman-* as identical with Av. *barəsman-*, the bundle of twigs used by the priests in the religious ceremonies, and translates 'ich verehrte den Ahuramazda durch *arta* und beim *brazman*.' But his locative *brazmaniya* ought to end in *-ā* and not in *-ā*, and equation with Av. *barəsman-* demands OP *barzman-* rather than *brazman-*, which is assured by the Elam. *pir-ra-iš-*. Further, the attachment of *-cā* 'and' to the prior of two nouns seems to be limited to metrical texts such as those of the Gāthās, where involved order seems to have been sought perhaps somewhat as in certain verse portions of the Icelandic literature; in the Gāthās, perhaps also to some extent under the constraint of metrical requirements (cf. §8, for another interpretation of *-cā* attached to the prior element).

6. In my own article in this journal, I normalized *artācā brazmaniy*, and trans-

¹ Initial vocalic *r* in OP was written *a-r-*, which without prejudice to the vocalic *r* I normalize *ar-*, as in *artācā*; but Herzfeld, wishing to indicate the pronunciation more clearly, refuses to write the *a-* and is therefore driven to regard the *a-* as a symbol for the glottal stop, thus normalizing '*r-*' as in '*rtācā*'. OP gives no evidence for such a glottal stop. My use of *c* rather than of *č* is a typographic simplification; the same cuneiform symbol is represented by both transcriptions.

² The Elamite and the Akkadian versions of this inscription contain an unusual number of OP words which are not translated, but merely transliterated.

³ This in order to make three syllables of *artā*, as *artāa* = Av. *ašāat* as in the Gāthās, Yasna 32.4c; in this way he makes an eight-syllable pada out of *artācā brazmaniya*. But this is forcing the matter; the OP texts are couched in very simple language, and any attempt to see in them a series of padas of eight syllables, or of any other number of syllables, is doomed to failure, like F. W. König's attempt in Relief und Inschrift des Königs Darius I am Felsen von Bagistan 84-92 (Leiden, 1938), cf. my remarks in JAOS 58.677.

⁴ But Yasna 53.5 *mənčā*, which he cites, is not a valid example; see M. W. Smith's interpretation, Studies in the Syntax of the Gathas of Zarathushtra 159.

lated 'I worshipped Ahuramazda and the holy Artā.' Herein I took *artā* as instr., used as a general case-form as in the Later Avesta (Reichelt, Aw. Elmb. §427) and here functioning as a correlative to the acc. *auramazdām*, with which it is connected by the enclitic *-cā* 'and'; a parallel is at hand in OP, for DB 1.64-5 has a list of four items of which the last is an instrumental though the first three are accusatives: *abicariš gaiḍām-cā māniyam-cā viḍbiš-cā* 'pasture land and livestock and household belonging(s) and houses'—however the last word is normalized and however the four words are translated, the case-forms and their syntactical relations are not in doubt. The following word I took as an adjective in the locative case, modifying *artā*: such inconcinnities are frequent in the Avesta. Etymologically I understood it to be a precise cognate to Skt. *brāhman-* 'religious devotion, prayer', though this is a noun. Against such an interpretation I now see two objections, the syntactic one just mentioned, of a locative adj. modifying an instrumental noun, and second, the lack of *-ā* as the final of the locative form. For the locative form in OP always ends in *-ā*, either as part of the normal case-ending, or as an added postposition, except in loc. sg. of place names, such as *Pārsaiy* 'in Persia', *Margaw* 'in Margiana', *Haḡmatānaiy* 'at Ecbatana', *Bābiraw* 'at Babylon', and in adverbs, such as *nipadiy* 'behind the foot of, close after', *dūrai* 'far off'. I must also confess that I overlooked the evidence of the Elamite in favor of a normalized form *brazmaniya* rather than *brazmaniy* (see §5).

7. Herzfeld further discusses this phrase in his *Altpersische Inschriften* (1938), where he gives the texts and translation on pages 27-35, and treats *brazmani-* on pages 116-8. He considers the various possibilities of normalization (*-tya*, *-iya* for postconsonantal *-ya*, *-iy*, *-aiy*; he overlooks *-īy* and *-aiya*) and says that the context demands an instr. sg. modifying *artā* or an acc. dual modifying *auramazdām* and *artā* jointly, or a loc. sg. *brazmaniy* as an appositive, meaning *ἐν τῷ ὕψιστος* 'in the highest'. From an adj. *brazmaniya-* he can derive no suitable form; he therefore decides upon an adj. stem in *-i-*, *brazmani-*, to which *brazmaniy* (he means *-īy*⁵) would be either instr. sg. or acc. dual. He associates it etymologically with Skt. *brāhman-* and adj. *brahmanyā-*, and with Av. *barag-* 'religiöser Brauch, religiöse Form, Ritus', root *barag-* 'willkommen heissen', and their derivatives. These last two Avestan words Bartholomae (AiW 957, 945) regards as from different roots, doubtless on the basis of their divergent meaning, but Herzfeld condemns the separation, without noting that OP *brazman(i)-* cannot be connected with either *barag-* or *barag-*, both of which would require OP **bragman(i)-*. On the likelihood of a stem *brazmani-* I shall speak in §11; if it existed its Iranian instr. sg. would end in *-ī*, graphically *-īy* in OP

⁵ Cf. the following instrumental forms: Av. (Gathic) *ašī*, (Late) *paiti*, *cišti*, and similar forms in Vedic Skt.; Brugmann, Gdr.² 2.2.189, 191-3, regards these as the original PIE formation of the instr., but Bartholomae, Gdr. d. iran. Phil. 1. §218.3, and Reichelt, Aw. Elmb. §333, consider them analogical new formations for older (Aryan) *-yā*, on the basis *-ī* to *-i-* stems as (Aryan) instr. *-ā* to *-ā-* stems. There is no possibility that OP *brahmaniya* is an instr. in *-ya* with an ending identical with that in the Skt. gerunds *kṛt-ya* etc., if such gerunds are in fact instrumentals (cf. Brugmann, Gdr.² 2.2.189), since final *-ā* in OP, if not protected by an unwritten minimal consonant, was written as though a long vowel, and such a form would therefore in OP be written *-yā*.

(cf. note 5). But as to the propriety of a dual form, it would be peculiar to have an acc. nt. dual adjective modifying the sum of an acc. sg. masc. and an instr. sg. nt., especially when the adjective would be juxtaposed to *artā*, which it modified without being of the same number or of the same case. Finally, the evidence of the Elamite is that our word ends in *-niya*, which suits neither an instrumental nor a dual.

8. At about the same time H. S. Nyberg dealt with this phrase in his volume *Die Religionen des alten Iran* 367 (German translation by H. H. Schaeder, 1938). Nyberg's general thesis is that the religion of the Achaemenian kings, though they worshipped Ahuramazda, was quite different from the faith proclaimed by Zoroaster; but with that we have not here to do. He normalizes *artācā barzmaniya* and translates 'anbeten (*yad-*) beim *barzman* und mit *arta*'. He regards it as an extremely old formula, with parallels only in the Avestan Gāthās, and of Median origin, since, he says, *barzman* is a special Median form.⁶ His inversion of the two elements in the phrase he bases on a rule of word-order which he sets up for the Gāthās (page 123, and note 1 thereto on pages 445-6), that two words connected by *-cā* may be reversed in order—as though Latin *terrā marī-que* might become *marī-que terrā*; he finds a parallel in the Icelandic poems; he says that with these exceptions the particles OP *-cā*, Lt. *-que*, and their cognates are not attached to the word which is prior in the pair. On page 478, he denies connection of Iranian *arta-* with the meaning 'Gerechtigkeit'; he seeks to minimize the value of the variation *-ra/-ar-* in Skt. *brahman-* and Av. *barəsmān-*, so that these and *brazman-* may be virtually identical and the Elamite may be no real evidence for *braz-*: he would evaluate the Av. and the OP as *bṛz-* and the Skt. as *brah-*, comparing the similar variation in Av. *tərəsaiti* from **tṛsati* from PIE **tṛs-skēti* and Skt. *trāsati* from PIE **tres-eti*, from the same root **tres-* 'to tremble'.⁷ Against his interpretation are the uncertainty of his rule of order;⁸ the certain *braz-*, not *bṛz-*, of the OP, on the evidence of the Elamite;⁹ the short *-ā* which terminates his *barzmaniya*, so that the form cannot be an instrumental.¹⁰

9. On page 478 Nyberg quotes from a letter of H. W. Bailey, who takes the two words as adjectives in the nominative singular: "*arta-hacā barzmaniya*⁴ 'dem Arta folgend (*arta-hacan-*) und mit *barzman* versehen (*-ya-* Ableitung aus *barzman-*)'." But in *artācā* we can hardly assume a loss of *-h-* in *-aha-*, since

⁶ Median origin is very probable for any ritual phrase in the OP inscriptions, though such origin militates against Nyberg's thesis that the Achaemenian kings were not worshippers of Ahuramazda in the form preached by Zoroaster; for Zoroaster came from northwestern Iran, which is precisely where Media was situated. But he cannot maintain that *barzman-* is a special Median form; for while *-zm-* (from PIE *-ghm-*) became *-sm-* in Avestan, we have no evidence that *-zm-* is not its regular development in OP, nor have we any evidence that this cluster has a special development in Median which differs from that in OP. Note OP *patiyazbayam* 'I proclaimed', *Uvārazmiš* 'Chorasnia', *uzmayā-patīy* 'on a stake'.

⁷ This ablaut variation PIE *-re-:ṛ-* he could find elsewhere also, as in OP imperf. *arasam* 'I went', Mod. Pers. *rāsāš* 'he goes', tense-stem *rasa-* from PIE **re-skē-*, as compared with Skt. *ṛcchāti* from PIE **ṛ-skē-ti*. But cf. note 14.

⁸ The same objections hold against his rule of order, as against Hartmann's view that *-cā* and its cognates may be attached to the prior of the two elements; cf. §5.

⁹ Cf. §5.

¹⁰ Cf. the second part of note 5.

that loss took place only in *-ahah-*;¹¹ and normalization by *brazman-* or by *barzman-* has been discussed above and decided in favor of *braz-* on the evidence of the Elamite (§5). Bailey himself, in his *Zoroastrian Problems* 87 note 4 (issued 1943, but composed 1939), has " 'following rta and possessing (associated with) the brazman', assuming . . . that the second component is *hāčan-* from the base *hak-* 'accompany' "; the new point here is that he accepts *braz-*, though he does not note that this separates the word from Avestan *barəsman-*. Something on the use of the (Av.) *barəsman-*, later *barsom*, will be said in §13, which will be relevant to the interpretation of the OP word.

In 1940 or 1941, W. B. Henning, in BSOS 10.506 (1940-2), translated the phrase by 'I worshipped Ahuramazdā, holding the *Barəsman* (twigs) according to the Holy Law (*Rta*)'; he interpreted *artācā* as the equivalent of Av. *asāf hačā* (Yasna 31.2, etc.), with crasis. Henning himself, in a later article (Trans. of the Philological Society 1944.108-18), gave up *barzmaniya* in favor of *brazmaniya* because of the transcriptions in Elamite and Akkadian, and equated the word with Skt. *brahmanya-*. To Henning's interpretation of *artācā*, to which he still held, there is the same objection as to Bailey's view.

10. Sukumar Sen, in his *Old Persian Inscriptions of the Achaemenian Emperors* 155 (Calcutta, 1941), has a quite different interpretation. Normalizing *artācā brazmaniy*, he takes both words as acc. pl. nt., 'and the divine fulfilments'; *brazmānīy* is in his view an adjective equatable with Skt. noun *brāhmaṇ-* 'prayer, devotion', and has the short vowel in *-mānīy* instead of the long in *-mānīy* (cf. Skt. nt. pl. *nāmāni* to *nāman-* 'name', and similar case-forms in Avestan), even as *ahaniy* in lines 47 and 48 of this inscription stands for **ahānīy* 'may I be',¹² and gen. *Auramazdāhā* in lines 14, 33, 37, 44 for *-dāhā*.¹³ The incorrect vowel-length and the Elamite evidence for *-niya* are enough to refute his view.

11. After this critique of previous views, it is time to come to the constructive part of the discussion. On *artācā* there is nothing to add to what is already given in the summary of my earlier article (§6), which is virtually what Herzfeld said originally. But on Herzfeld's *brazmanīy* as instr. to stem *brazmani-*, something can be added: there is no corresponding stem **brahmani-* in Skt., and in Avestan the stem *barəsmani-* 'zum *Barəsman* gehörig, gebraucht' is represented by a single occurrence, acc. sg. fem. in *urvarqm barəsmanīm* (Yasna 22.3; AiW 949). There is also a stem *barəsmanyā-* of the same meaning, with two occurrences, in *urvarāhu paiti barəsmanyāhu* (Yasna 2.11) and *urvarā paiti barəsmanyā* (Yasht 10.145). The three occurrences of the two stems all modify forms of the word *urvarā-* 'plant'. For this reason I am inclined to reject the stem *barəsmani-* and to take *barəsmanīm* as graphic for *barəsmanyəm*, acc. sg. masc. from the stem

¹¹ JAOS 35.332-4; where I failed to include Justi's etymology, Iran. Namenbuch 101, of the personal name *Frāda-* as **fra-hada-*, to the root pIE **sed-* 'sit'. A better etymology, not involving a loss of intervocalic *-h-*, is given by Bartholomae, AiW 1013. The words and forms of inscriptions published since the time of my article in JAOS give no contrary evidence.

¹² On *ahānīy*, cf. C. J. Ogden ap. JAOS 58.325.

¹³ But Sen is wrong in citing *akariy* in line 42 (found also in DSf 37) as being for **akāriy* = Skt. *akāri*, aorist with long vowel; such OP forms are passives with *-ya-* suffix and active endings (cf. Schaefer, Ung. Jrb. 15.560-3) and are to be normalized *akariya* etc.

barəsmanya- used to modify the fem. *urvarqm*. But the decision against a stem *brazmani-* in OP must primarily be based on the Elamite transliteration, which requires OP *-niya* (§5). As we have seen (§5), the Elamite also requires OP *braz-* and not *barz-*. The only solution in accord with all the evidence is that the word is *brazmaniya*, and that this is *brazmaniya*¹⁴, nom. sg. masc. adj., precisely equatable with Skt. *brahmaṇya-h* 'religious'.¹⁴ Bailey almost reached this result, but translated by 'provided with the *barəsmān*' of the Zoroastrian cult. OP *brazmaniya*, graphic for *-ya*¹⁴, means 'prayerful, reverent'; in the passages of our inscription the idiom of English requires us to translate the adjective by an adverb.

12. The word *brazmaniya* is found in lines 41, 51, 54 of the *Daiva* Inscription of Xerxes; the passages, with adequate context, are the following, to which I append a translation:

- 39 . . . : *yadāyā* : *paruam* : *daivā* :
 40 *ayadiya* : *avadā* : *adam* : *Auramazdām* : *ayada-*
 41 *iy* : *artācā* : *brazmaniya* : . . .

'Where previously the *Daivas* were worshipped, there I worshipped *Ahuramazda* and *Arta* reverent(ly).'

- 46 . . . : *tuva* : *kā* : *hya* :
 47 *apara* : *yadimaniyāiy* : *šiyāta* : *ahaniy*
 48 : *jīva* : *utā* : *marta* : *artāvā* : *ahaniy* :
 49 *avanā* : *dātā* : *parīdiy* : *tya* : *Auramazd-*
 50 *ā* : *niyaštāya* : *Auramazdām* : *yadaišā* : *a-*
 51 *rtācā* : *brazmaniya* : *martiya* : *hya* : *avan-*
 52 *ā* : *dātā* : *pariyait** : *tya* : *Auramazdā* : *n-*
 53 *īštāya* : *utā* : *Auramazdām* : *yadataiy* : *a-*
 54 *rtācā* : *brazmaniya* : *hauw* : *utā* : *jīva* :
 55 *šiyāta* : *bavatiy* : *utā* : *marta* : *artāvā*
 56 : *bavatiy* : . . .

[For *tuva* 46, read *tuwam*; for *yadimaniyāiy* 47, read *yadiy* : *maniyāhaiy*; for *ahaniy* 47 and 48, read *ahāniy*; for *pariyait** 52, read *pariyaitiy*.]

'Thou who (shalt be) hereafter, if thou shalt think, "Happy may I be when living, and when dead may I be blessed," have respect for that law which *Ahuramazda* has established; worship *Ahuramazda* and *Arta* reverent(ly). The man who has respect for that law which *Ahuramazda* has established, and worships

¹⁴ I regret that *brazmaniya* is not equatable with Avestan **barəsmanyō* in a meaning 'holding in hand the *barəsmān*-'; this would be a deceptively easy solution, but would require an ablaut variation (Aryan) *-ra/-ar-*, rarely if ever found in precisely equivalent words. Peculiarly, no other development of the ancestor of Skt. *brahmaṇ-* has been found in Iranian; but there are many words and forms which appear in the Avesta, for example, but a single time. Yet unless *brahmaṇ-* is a specifically Indic formation, not yet made in Proto-Aryan times—and who would be so bold as to urge such a view?—the OP may well have preserved the word from Proto-Aryan times. It is even possible that its disappearance in Avestan is due to the competition of the phonetically similar *barəsmān-* in an important technical use, of quite different meaning.

Ahuramazda and Arta reverent(ly), he both becomes happy when living, and becomes blessed when dead.'

13. In conclusion, I wish again to discuss the view that takes *brazmaniy* or *brazmaniya* (or *barzm-*) as referring to the *barəsmān-*, or bundle of twigs used by the Zoroastrian priests in their ceremonies, replaced in India today by a bundle of metal rods (AiW 948, with ref.). Our text in lines 46-56 indicates clearly that at the time of the inscription the practice denoted by the word could be and must be practiced by any true believer who desired happiness in this life and blessedness in paradise. Today the use of the *barəsmān-* or *barsom* is restricted to the priesthood. Doubtless in the beginning the *barəsmān-* was, like the Vedic *barhiṣ-*, strewn upon the ground around the sacrificial fire by the collected worshippers; today the Zoroastrian ceremonies are performed indoors by the priests, with entrances so shielded that the laity get no glimpse of what goes on inside. At some time, then, the use of the *barəsmān-* must have been taken away from the laity; we may not be able to decide whether in Xerxes' time every pious worshipper might hold the *baresman-* in his hand during the ceremonies, but it would be very hazardous to assert positively that such was the case. For changes had certainly taken place in Zoroastrianism between the time of Zoroaster himself and the time of Xerxes: *arta-*, the abstract 'justice', had been personified to *Arta*, the Amshaspand or Archangel, worshipped alongside Ahuramazda himself; and *artāvan-*, the Avestan *ašavan-*, meaning 'characterized by *Arta*', is the term used in lines 48 and 55 of our inscription to denote the state of the righteous believer who is 'blessed' in paradise.

THE PARTS OF THE BODY IN THE MODERN SOUTH ARABIC LANGUAGES

WOLF LESLAU

ÉCOLE LIBRE DES HAUTES ÉTUDES

The parts of the body in Semitic¹ were dealt with in two important studies: F. Dietrich, *Ueber die Gliedernamen im Semitischen*, in his *Abhandlungen für semitische Sprachforschung* 101-258 (Leipzig, 1844); and H. Holma, *Die Namen der Körperteile im Assyrisch-Babylonischen* (Leipzig, 1911). Dietrich has a large collection of the names of the parts of the body in the Semitic languages known at the time; but his etymological explanations can be disregarded in view of the tendency, characteristic for that epoch, to explain the meaning of the words by two radicals of the root. Holma's book is a valuable collection, with sound etymological explanation. It would be desirable for Akkadian scholars to complete this collection systematically from the Akkadian texts discovered since 1911.

¹ The abbreviations of the titles of the books are as follows:

- Bittner, *Mh. St.* = *Studien zur Laut- und Formenlehre der Mehri-Sprache*, 1909-14.
 —, *Šh. St.* = *Studien zur Šhauri-Sprache in den Bergen von Dofar am Persischen Meerbusen*, 1916-17.
 —, *Charakteristik* = *Charakteristik der Sprache der Insel Soqatra*, 1918.
 Brockelmann, *Grundriss* = *Grundriss der vergleichenden Grammatik der semitischen Sprachen*, Vol. I, 1908.
 —, *Lex. Syr.* = *Lexicon Syriacum*, 2nd edition, 1928.
 Dietrich, *Abhandlungen* = *Abhandlungen für semitische Sprachforschung*, 1844.
 Dillmann, *Lex.* = *Lexicon linguae Aethiopicae*, 1865.
 Fraenkel, *Beiträge* = *Beiträge zur Erklärung der mehrlautigen Bildungen im Arabischen*, 1878.
 Goitein, *Jemenica* = *Jemenica, Sprichwörter und Redensarten aus Zentral-Jemen*, 1934.
 Holma, *Körperteile* = *Die Namen der Körperteile im Assyrisch-Babylonischen*, 1911.
 Jahn, *Mehri-Sprache* = *Die Mehri-Sprache in Südarabien, Südarabische Expedition*, Vol. III, 1902.
 Landberg, *Glos. Dat.* = *Glossaire Datinois*, 1920-23.
 —, *Ḥaḍramout* = *Études sur les dialectes de l'Arabie méridionale*, Vol. I. *Ḥaḍramout*, 1901.
 Leslau, *Lex. Soq.* = *Lexique Soqatri (Sudarabique moderne)*, 1938.
 Nöldeke, *NBS* = *Neue Beiträge zur semitischen Sprachwissenschaft*, 1910.
 Reinhardt, *Oman* = *Der arabische Dialekt gesprochen in Oman und Zanzibar*, 1894.
 Stace, *Vocabulary* = *An English-Arabic vocabulary*, 1893.
 Thomas, *Four tongues* = *Four strange tongues from South Arabia. The Hadara group*, 1937.

The names of the languages are abbreviated as follows:

Akk. = Akkadian, Amh. = Amharic, Ar. = Arabic, Aram. = Aramaic, Bot. = Botahari, Dat. = Daṭina, G. = Geez, Hars. = Harsusi, Hebr. = Hebrew, Ḥaḍr. = Ḥaḍramout, Mh. = Mehri, NHebr. = No-Hebrew, Om. = Omani, Šh. = Šhauri, Soq. = Soqatri, South-Ar. = Epigraphic South Arabic, Syr. = Syriac, Te. = Tigré, Tña. = Tigrña, Ugar. = Ugaritic, Yem. = Yemenite.

I wish to express my thanks to Leo A. Oppenheim for his help in the interpretation of the Akkadian words.

The biliteral nouns of the parts of the body in the Semitic languages (Akkadian excluded) were discussed by Th. Nöldeke, *Zweiradicalige Substantiva*, in his *Neue Beiträge zur semitischen Sprachwissenschaft* 109-78 (Strassburg, 1910).

The metamorphic use of the names of the parts of the body in Hebrew and Akkadian is the subject of a series of articles by P. Dhorme, *L'emploi métamorphique des noms des parties du corps en hébreu et accadien*, in *Revue Biblique* for 1920-23.

For the use of parts of the body as prepositions, see Brockelmann, *Grundriss* II. 421-4.

The study presented here is meant to be a contribution to a comparative study of the Semitic vocabulary. It shows that the modern South Arabic languages have many words for parts of the body which are not found in any other Semitic language, and that these languages occupy an independent position in the Semitic languages.

The following languages belong to the modern South Arabic group: (a) Mehri, and its dialects: Botahari and Harsusi; (b) Šħauri, and its dialect of Curia Muria; (c) Soqoṭri. The sources of the modern South Arabic words are the following:

For MEHRI: A. Jahn, *Die Mehri-Sprache in Südarabien*, Wien, 1902; M. Bittner, *Studien zur Laut- und Formenlehre der Mehri-Sprache in Südarabien*, Wien, 1909-14; B. Thomas, *Four strange tongues from South Arabia: the Hadara group*, in *Proceedings of the British Academy* 23.239-331 (1937).

For BOTAHARI, HARSUSI: B. Thomas, *Four strange tongues*.

For ŠħAURI: M. Bittner, *Studien zur Šħauri-Sprache in den Bergen von Dofar*, Wien, 1916; B. Thomas, *Four strange tongues*.

For CURIA MURIA: J. G. Hulton, *Notice of the Curia Muria island*, *Transactions of the Bombay Geographical Society* 8.183-97 (1840).

For SOQOṬRI: W. Leslau, *Lexique soqoṭri (Sudarabique moderne)*, Paris, 1938.

In order to clarify the comparison between the modern South Arabic languages and the other Semitic languages, we give a table of phonetic correspondences between modern South Arabic, Arabic, Hebrew, and Aramaic:

MEHRI	BOTAHARI	HARSUSI	ŠħAURI	SOQOṬRI	ARABIC	HEBREW	ARAMAIC
{	{	{
b	b	b	b	b	b	b	b
d	d	d	d		d	d	
				}d			}d
<u>d</u>	<u>d</u>	<u>d</u>	<u>d</u>		<u>d</u>	z	
<u>q</u>	<u>q</u>	<u>q</u>	<u>q</u>	<u>q</u>	<u>q</u>	š	š
f	f	f	f	f	f	f	f
g	g	g					
			}g ²	}g	}ğ(?)	}g	}g
ğ	ğ	ğ					

² According to Thomas's documents, Šħauri has also *g* and *ğ*.

MEHRI	BOTAHARI	HARSUSI	ŠHAURI	SOQOTRI	ARABIC	HEBREW	ARAMAIC
ḡ	ḡ	ḡ	ḡ	˙	ḡ	˙	˙
h ³	h	h	h	h	h	h	h
h ⁴	h	h	h	}h	h	}h	}h
ḥ	ḥ	ḥ	ḥ		ḥ		
k	k	k	k	k	k	k	k
l	l	l	l	l	l	l	l
m	m	m	m	m	m	m	m
n	n	n	n	n	n	n	n
q	q	q	q	q	q	q	q
r	r	r	r	r	r	r	r
s	s	s	s	s	s	s	s
š	š	š	š	š	š	š	š
š ⁵	š	š	š	š	s	š	š
ś	ś	ś	ś	ś	š	s	s
t	t	t	t	}t	t	t	}t
ṭ	ṭ	ṭ	ṭ		ṭ	š	
ṭ	ṭ	ṭ	ṭ	}ṭ	ṭ	ṭ	}ṭ
ṭ	ṭ	ṭ	ṭ		ṭ	š	
w	w	w	w	w	w	w	w
y	y	y	y	y	y	y	y
z	z	z	z	z	z	z	z

VOCABULARY

The modern South Arabic words are arranged as follows:

1. Words common to all the Semitic languages
2. Words found in South Arabic and in South Semitic (Arabic, Ethiopic)
 - 2.1. South Arabic - Arabic
 - 2.2. South Arabic - Ethiopic
3. Words common to South Arabic and North Semitic
4. Words found in South Arabic, Akkadian, and Ethiopic
5. Words found in South Arabic only
 - 5.1. Words that have a Semitic etymology
 - 5.2. Words without Semitic etymology

³ For *h* of some of the modern South Arabic languages corresponding to *š* (*s*) of the other Semitic languages, see W. Leslau, *Le rapport entre š et h en sémitique*, in *Annuaire de l'Institut d'histoire et de philologie orientale et slave*, 7.265-73(1944).

⁴ For the initial *h* in some primitive nouns, especially in Mehri, Botahari, and Harsusi, see A. Ember, *Mehri parallels to Egyptian stems with prefixed h*, *Zeitschrift für ägyptische Sprache* 51.138 (1914); W. Vycichl, *Über ein ha-Präfix im Arabischen*, *WZKM* 43.10 (1936); W. Leslau, *Über das ha-Präfix im Arabischen*, *ib.* 44.219-20 (1937); W. Vycichl, *Wieder über das ha-Präfix im Arabischen*, *ib.* 46.141-2 (1939).

⁵ For *š* in the modern South Arabic languages, see W. Leslau, *Der š-Laut in den modernen südarabischen Sprachen*, *WZKM* 44.211-18 (1937).

- dnb*: Soq. *dinob* 'tail'; see *dnb*.
- dqn*: Soq. *digehon* 'beard'; Ar. *dagan*, Hebr. *zāqān*, Aram. *diqnā*, Akk. *ziqnu*, Ugar. *dqn*; for epigraphic South Arabic, see Rhodokanakis, Studien zur altsüdarabischen Epigraphik I.69.
- dnb*: Mh. *denōb* 'tail', Šh. *denub*, Soq. *dinob*; Ar. *danab*, Hebr. *zānāb*, Syr. *dūn'bā*, Akk. *zimbātu*, *zibbatu*, G. *zanab*.
- dr'*: Šh. *dira* 'fore-arm'; Ar. *dirā*, Hebr. *z'ro'a*, Syr. *d'rā'ā*, G. *mazrā't*, Kanaanite gloss in the Amarna letters *zu-ru-uḥ*.
- dl'*: Mh. *dala* 'rib'; see the following word.
- dl'*: Šh. *dela* 'rib', Mh. *dala*, Soq. *dalh* (the final ' became voiceless in Soqotri, see Leslau, Lex. Soq. 19); Ar. *dil'* (*dali'a* 'curvatus est'), Hebr. *šēlā*, Aram. *'elā*, Syr. *'el'ā*, Akk. *šēlu*.
- dlh*: Soq. *dalh* 'rib'; see the preceding word.
- ḏnh*: Soq. *ḏanaḥ* 'lap', also *zanḥ*; represents a metathesis of Semitic: Ar. *ḥiḏn*, Hebr. *ḥošen*, Syr. *ḥan(n)ā*, G. *ḥḏn*.
- f'*: Soq. *fio* 'forehead'; Hebr. *pe'ā(h)* 'edge, rim', Aram. Syr. *pa'tā* 'face', Ugar. *p't*, Akk. *pātu* 'forehead, temple', Amh. *fit* 'face'; for Ar. *fi'a*, see Nöldeke, NBS 152. For the relation between 'face' and 'forehead', see Dietrich, Abhandlungen 137.
- fhl*: Mh. Hars. Šh. Soq. *fahl* 'penis'; Ar. *fahl* 'male', Akk. *paḥallu* 'testicles', Ugar. *pḥl* 'stallion', Syr. *pāḥaltā* 'testicles', G. *faḥala* 'lascivum, petulantem esse'.
- fhd*: Mh. *fahed* 'thigh', Soq. *fahid*, Šh. *fuḥud*, *fakaid* (Thomas), Hars. (i)*fkaḏ*; Ar. *fahid*, Hebr. *paḥad*, Syr. *puḥdā*.
- fkd*: See the preceding root.
- fny*: Soq. *fáne* 'face', Mh. *fenne* (Thomas), Šh. *fenne*; Hebr. *pānīm*, Akk. *pānu*, *pānāti*, Ugar. *pn-m*, Syr. *p'nīlā* 'direction', Ar. *finā* 'yard in front of the house'.
- fqrr*: Soq. *figeriroh* 'neck, nape of the neck'; Ar. *fuqra* 'vertebra', Syr. *pāraqālā* 'neck', Fellihi *paqarta* (Brockelmann, Grundriss I.277), Hebr. *mapreqet*, Aram. *p'riqātā*.
- gd*: Šh. *god* 'skin', Curia *gud*, Soq. *gad*; see *ḡld*.
- gh*: Soq. *gehe* 'chest' (also *kho*), Šh. (e)*gehe*; Ar. *ḡaww* 'interior', Hebr. *g'wiyā* 'corpse', Aram. *g'wiyā* 'intestine', Syr. *gawwā*, South-Ar. *gw*; in Ugar. *g* means 'voice'; for *ge* in Amharic and other Ethiopic languages, see M. Cohen in Comptes rendus du Groupe linguistique d'études chamito-sémitiques I.33(1933). For the relation between these meanings and 'to enter, valley', see Nöldeke ZA 12.3, 30.167, and Haupt AJSL 26.1.
- gmgm*: Soq. *gemgemoh* 'head', Šh. *gimguñt*; Ar. *ḡumḡuma*, *ḡalaḡa* and *ḡalḡala* 'skull' (Růžička, Konsonantische Dissimilation in den semitischen Sprachen 40), Hebr. *gulgolet*, Aram. *gogaltā*, Akk. *gulgullu*.
- gnz*: Mh. *ginōzit* 'corpse', Hars. *ginizat*, Soq. *genazeh* 'funeral'; see *ḡnz*.
- grm*: Šh. *gurmo* 'nape of the neck', Mh. *gurma*; probably to be connected with Ar. *ḡirm* 'body', Syr. *garmā* 'bone', Hebr. *gerem*, South-Ar. *grb* 'person'.
- gss*: Hars. (i)*gsoš* 'forehead'; see *qss*.
- gtf*: Šh. *gutuf* 'feather', Mh. *gutafif*; see *ktf*.
- gzl*: Mh. *guzat* 'forehead' (Thomas), to be read *guzat*, see *qss*.

- ǧld*: Mh. *ǧeld* 'skin' (also *ǧot*), Soq. *gad*, Šh. *god*, Curia *gud* (for the weakening of *l*, see Leslau, Lex. Soq. 38); Ar. *ǧild*, Hebr. *geled*, Syr. *geldā*, Akk. *gildu*, *giladu*; Dillmann, Lex. 1491 compares also G. *galada* 'obducere'.
- ǧnz*: Šh. *ǧinôzit* 'corpse', Mh. *ǧinôzet* 'corpse, body' (also *ǧinôzit*), Hars. *ǧinizat*, Soq. *genazeh* 'funeral'; Ar. *ǧanāza* 'corpse' is considered by Nöldeke, NBsS 58, as a loan-word from Ethiopic *gnz* 'to hide'; Aram. *g'naz* 'to hide'.
- hbn*: Mh. *hābīn* 'thumb'; represents a metathesis of Semitic: Ar. 'ibhām, Arabic of Spain *ibhen* (Brockelmann, Grundriss I.233), Hebr. *bohen*, Akk. *ubānu*.
- hđn*: Mh. *hayđēn* 'ear', Hars. *hayidi*; see *đn*.
- hšb*('): Mh. *hašeba* 'finger' (Thomas), Hars. *hašaba*; see *šb*'.
- hkw*: Mh. *hakou* 'waist'; Ar. *haqw*, G. *haq^we* 'loins', Tigré *haqo* 'after' (derived from the meaning 'the hind part of the body'). For the relation between this root and the Hebr. *hēq* 'lap', see Barth, Etymologische Studien 61, Vollers ZA 17.308, Landberg, Glos. Dař. 465.
- hbb*: Hars. *halbib* 'heart'; see *lbb*.
- hr*: Mh. *herē* 'head', Hars. *hirī*; see *r'š*.
- hubb*: Mh. *howbib* 'heart' (Thomas), from *halbib* (*al* > *ow*); see *lbb*.
- hyd*, *hyt*: Mh. *heyd* 'hand', Hars. *hait*; see *d*.
- hr*: Hars. *horit* 'nape of the neck'; see *qr*.
- kff*: Mh. *keff* 'back of the hand'; Ar. *kaff*, Hebr. *kap*, Syr. *kappā*, Akk. *kappu*, Ugar. *kp* 'palm of the hand', from the Sem. root *kff* 'to bend'.
- kh*: Soq. *kho* 'chest'; see *gh*.
- kl'/y*: Mh. *kelīt* 'kidneys', Šh. *kulyēt*, *kili* 'lungs' (Thomas), Soq. *keloih* 'intestine', Hars. *kilaiyitīn* 'lungs'; Ar. *kulya* 'kidneys', Hebr. *kilyā*, Syr. *kulyā*, G. *k'əlīt*, Akk. *kalītu* and *kalū* (?).
- kr*: Mh. *kar-t* 'throat', Šh. (*i*)*kayart*; see *qr*.
- kršn*: Mh. *kuršīn* 'thigh', *karzeyn* 'kneecap', Šh. *kiršenot* 'leg'; Akk. *qursinnu* 'leg, anklebone' (Bittner Mh.St. IV.54), Hebr. *qarsol*, Aram. *qarsulā*, *qaršulā*, Syr. *qurš^ula*, Punic *qšrt* (Praetorius, ZDMG 60.165); the root is compared by Brockelmann Grundriss I.395 with Ar. *kursū*; see also Holma, Körperteile 148 n.1.
- krzn*: Mh. *karzeyn* 'kneecap'; see the preceding root.
- křf*: Mh. *kataf* 'wing', Hars. *kitif* 'shoulder', Šh. *gutuf*, *qetuf* 'feather', Mh. also *quttuf*, *gutafif* (Thomas); Ar. *katif* 'shoulder', Hebr. *kāteř*, Syr. *katpā*, Ugar. *křp*, Akk. *katappātu* 'shoulder', G. *matkřft*. For the relation between the meanings 'shoulder, back, wing', cp. Tigré *denabēr* 'wing', Ar. *dubr* 'back', Soq. *kozi* 'wing, shoulder'.
- lbb*: Soq. 'ilbib 'heart' with prothetic 'l', Šh. 'ub (for the weakening of *l*, see Bittner, Šh.St. I.16), Mh. *halbib*, *howbib* (*al* > *ow*), Hars. *halbib*; Ar. *lubb*, Hebr. *leř*, Syr. *libbā*, Akk. *libbu*, Ugar. *lb*, G. *leř*, South-Ar. *lbb*.
- lhy*: Mh. *leheyřt* 'chin, beard', Šh. (*e*)*lhyet*, Soq. *lahyet* 'beard'; Ar. *luha^a* 'cheek', *lihya* 'beard', Hebr. *l'hī* 'jaw', Ugar. *lř-m*; for Akk. *lahū*, *lū'u*, *lētu*, see Brockelmann, Grundriss I.128, and Holma, Körperteile 31.—Soq. *ma-lahi* 'cheek', Mh. *ma-lhau* 'molar teeth', literally 'relating to the cheek'.
- lšin*: Soq. *lešin* 'tongue', Mh. *lišin*, Šh. *lišan*, Hars. *lašīn*, Bot. *lišīn*; Ar. *lisān*, Hebr. *lašōn*, Aram. *lišānā*, G. *lāsān*, Akk. *lišānu*; for the etymology, see Haupt BA I.324, and Bittner WZKM 23.144.

- m'y*: Mh. *ma'wīn* 'bowel', Soq. *mi'ho* 'intestine'; Ar. *mi'a*, Hebr. *me'im*, Syr. *m'āyā*, G. *'amā'ut*, Akk. *amātu* 'liver'; for the etymology of Akk. *amātu*, see Albright RA 16.176.
- mrr*: Soq. *merr* 'belly'; Ar. *mirra* 'gall', Hebr. *m'rērā*, Syr. *mer'tā*, Akk. *martu*; for the relation of the meanings, cp. Akk. *kabittu* 'liver, belly'.
- mtn*: Soq. *moten* 'hip'; Ar. *matn* 'partie du dos de chaque côté de l'épine dorsale' (Kazimirski), Hebr. *moṭnayim* 'loins', Syr. *maṭnātā*, G. *matn*; for Akk. *matn*, see Holma, *Körperteile* 6, n. 3.
- nḥrr*: Soq. *naḥrir* 'nose'; see *nḥrr*.
- nḥš*: Soq. *monḥeš* 'hip'; Ar. *ḥašr*, Hebr. *ḥešeš*, Syr. *ḥaš(š)ā*, Aram. *ḥaršā*, Akk. *hinšā*. For the different roots, see Brockelmann, *Grundriss* I 126, 177, 246.
- nḥrr*: Mh. *naḥrīr* 'nose', Šh. *naḥrir*, Curia *nuḥurir*, Soq. *naḥrir*, Hars. (i) *nḥarir*, Bot. *nuḥarir*; Omani *noḥra* 'nose', Yemenite *nuḥra*, Ar. *minḥar* 'nostril, nose', Hebr. *n'ḥirayim* 'nostril', Syr. *n'ḥirā*, Akk. *naḥīru*.
- qb(t)*: Mh. *qabīt* 'stomach'; Ar. *qiba* and *qibba*, Hebr. *qēbā(h)*, Te. *qābūt* 'stomach, midst'; for this root in the Semitic languages, see Nöldeke, *NBS* 155. The root is related with Ar. *qabqab* 'stomach', Nhebr. *qurq'ḥān*; for Akk. *qū-qubānu*, see Holma, *Körperteile* 146.
- qn (qrn)*: Soq. *qan* 'horn', Mh. *qōn*, Hars. *qon*, Šh. *qun*; Ar. *qarn*, Hebr. *qeren*, Syr. *qarnā*, G. *qarn*, Akk. *qarnu* and *qannu*, Ugar. *qrn(m)*.
- qr*: Soq. Mh. *qar* 'neck', Mh. also *kart* 'throat', Hars. (a) *qarit* and *ḥorit* 'nape of the neck', Šh. (i) *kayart*; Ar. *ḡirān*, Heb. *gāron*, G. *ḡar'e*, Amh. *ḡararo*, Akk. *girru*, *ganguritu*, from the root *gr* (see also Holma, *Körperteile* 42, Brockelmann *ZDMG* 67.107).
- qss*: Mh. *qeššōt* 'forehead', Mh. also *guzaṭ* (Thomas) to be read *guzat*, Šh. *qeššet*, Hars. (i) *gsoš* and *gušsuṭ* (to be read *gušsut*); Ar. *qušša* 'front, foretop', Hebr. *q'wuššā* 'tuft', Syr. *qayš'tā*.
- qtf*: Mh. *quttuf* 'feather', Šh. *qetuf*; see *ktf*.
- r'*: Šh. (e) *ri*, (i) *rot* 'lung', Hars. (a) *rit*; Ar. *ri'a*, Nhebr. *re'ā*, Syr. *ra'tā*, Ugar. *irt* 'breast'. For this root in Semitic, see Nöldeke, *NBS* 151; for Akk. *ru'tu*, *irtu*, see Holma, *Körperteile* 43 n.1, 44.
- r'*: Soq. *re*, *rey* 'head'; see the next root.
- r's*: Šh. *reš*, Curia (e) *reš*, Soq. *re*, *rey*, Mh. *herê*, Hars. *ḥirī*, Bot. (e) *rt* 'head'; Ar. *ra's*, Hebr. *ro's*, Syr. *ro'sā*, G. *rā's*, Akk. *rēšu*, Ugar. *riš*.
- rkb*: Šh. (e) *rkebet* 'knee'; see *brk*.
- rwḥ*: Soq. *riḥoh* 'hand', Mh. *rīhot* 'palm of the hand'; Ar. *rāḥa* 'palm of the hand' G. *'arāḥ*, Akk. *rittu*, Ugar. *rīt-m*, Hebr. *raḥaṭ* 'shovel'; for Syr. *laḥ'tā*, see Brockelmann, *Grundriss* I.230.
- šb'*: Šh. *šba'*, (i) *šba'* 'finger', Soq. (i) *šbaḥ*, *šobeḥ*, Mh. *hašeba*, Hars. *hašaba*; Ar. *'iṣba'*, Hebr. *'ešba'*, Syr. *šeḇ'ā*, Ugar. *uṣb't*, G. *'ašba't*. For the non-existence of this root in Akkadian, see Holma, *Körperteile* 126 n.5.
- šbd*: Mh. *šebedit* 'liver', Soq. *šibdeh*, Šh. *šibdit*, Hars. *šebdit*; Ar. *kabid*, Hebr. *kāḇeḏ*, Syr. *kabdā*, G. *kabd*, Akk. *kabittu*, Ugar. *kbd*; the *k* is prepalatalized into *š* in the modern South Arabic languages.
- šnn*: Šh. *šun(n)* 'tooth'; Ar. *sinn*, Hebr. *šen*, Syr. *šennā*, G. *sən*, Akk. *šinnu*.
- šr'*: Mh. *šira* 'navel', Soq. *širaḥ*, *širaḥ*; Ar. *surr*, Hebr. *šor*, Syr. *šer(r)ā*; from the root *šrr* 'to be strong'.

- šr'-n*: Soq. *šer'ehan* 'foot', Mh. *šrayn*; probably to be compared with Ar. *kurā* 'the thin part of the leg, leg', Yemenite *kir'ān* (see Leslau, MSL 23.408, WZKM 44.212), Hebr. *k'rā'ayim*, Syr. *k'rā'ā*, G. *k'arnā* 'arm', Akk. *kurītu*. The Semitic *k* is prepalatalized into *š* in the modern South Arabic languages.
- šrh* (*šrh*): Soq. *širah*, *širah* 'navel', represents the root *šr*, *šr* with devoicing of the final *h*; see *šr*.
- šrs*: Soq. *šeres* 'stomach'; Ar. *karš*, Hebr. *kereš*, Aram. *karsā*, G. *karš*, Akk. *karšu*; the Sem. *k* is prepalatalized into *š* in Soqotri (Leslau, Lex. Soq. 24).
- š(t)*: Mh. *šit* 'penis', Šh. *šit* 'posterior'; Yem. *'ist* 'pudenda', Ar. *'ist* 'posterior', Hebr. *šet*, Syr. *šet* (with Bittner, Šh.St. I.18 n., as opposed to Landberg, Glos. Dař. 454). For Akk. *išdu* 'leg (with the posterior)', see Holma, Körperteile 128; for the biliteral root in the Semitic languages, see Nöldeke, NBsS 143. See also Gesenius-Buhl, Hebräisches und aramäisches Handwörterbuch 866.
- š'r*: Soq. *ša'ihor* 'hair'; Ar. *ša'r*, Hebr. *šē'ār*, Syr. *sa'rā*, G. *šə'art* and *šag'ar* (Brockelmann, Grundriss I.169), Akk. *šārtu*.
- šb*: Soq. *šebēh* 'lip', Hars. *šaiḃit*; Ar. *šafa*, Hebr. *šāpā(h)*, Syr. *septā*, Akk. *šaptu*, Ugar. *špt*; for this root in Sem., see Nöldeke, NBsS 127; see also *šfr*.
- šry-n*: Mh. *šrayn* 'leg'; see *šr'-n*.
- td*: Soq. *todi* 'breast'; see *td*.
- td*: Šh. *tēdi* 'breast', Mh. *tōdi*, Soq. *todi*; Ar. *ṭad*, *ṭady*, Hebr. *šad*, Aram. *tadyā*, Ugar. *sd* and *td*; for this root, see Nöldeke, NBsS 121.
- tlhm*: Mh. *talḥaym* 'milt'; see *tlhm*.
- ṭfr*: Mh. *ṭayfēr* 'nail, claw', Soq. *ṭifer*; see *ṭfr*.
- tlhm*: Šh. *ṭalḥim* 'milt', Mh. *ṭahaym*; A. *ṭihāl*, Aram. Syr. *ṭ'hālā*, Nhebr. *ṭ'hol*; for the suffix *-m* in the Semitic languages, see Brockelmann, Grundriss I.396, Fränkel, Beiträge 39-47.
- ṭfr*: Šh. *ṭefer* 'nail', Soq. *ṭifer*, Mh. *ṭayfēr*; Ar. *ṭufr*, Syr. *ṭeprā*, Hebr. *šipporen*, G. *šəfr*, Akk. *šupru*.
- wrk*: Mh. *wirkāt* 'hip', Šh. *'erk* 'hip', *'erket* 'pudenda', Curia *'airkot* 'foot'; Ar. *warik* 'hip, posterior', Hebr. *yāreḳ* 'hip', Aram. *yarkā*, Akk. *arkatu*, Ugar. *yrkt(?)* 'sides, extremities'.
- znḥ*: Soq. *zanḥ* 'lap'; see *qnḥ*.
- yd*: Curia *yed* 'hand'; see *d*.

2. Words Common to South Arabic and South Semitic (Arabic and Ethiopic)

- 'dn*: Šh. *'eden* 'body'; see *bdn*.
- 'ṭb*: Šh. *'etob*, *'eñṭebeta* 'dug', Soq. *'aṭab*; see *wṭb*.
- bdn*: Mh. *bedēn* 'body', Šh. *'eden* (for the weakening of the *b*, see Bittner, Šh.St. I.11); Ar. *badan*, G. *badn* 'corpse'.
- ḏrh*: Mh. *mḏarah* 'tooth'; Bittner, Mh.St. I §21 n.1 compares it with Ar. *ḏirs* 'tooth', G. *ḏirs*.
- hlqm*: Šh. *ḥalqoñt* 'throat'; Ar. *ḥalqum* and *ḥalq*, Yem. *ḥalg*, Dař. *ḥalqum*, G. *ḥalq*; the root might be *hlq* or *lqm* with an agglutinated *ḥ* (see under *hng*); for this root, see also Landberg, Glos. Dař. 457-7.

wṭb: Mh. *wōṭob*, *yōṭob* 'breast', Soq. *'aṭab*, Šh. *'eñṭebeta*; Ar. *waṭb* and *ṭiby*, G. *ṭab*, Amh. *ṭut*; see also Nöldeke, NBS 146.
yṭb: Mh. *yōṭob* 'breast'; see *wṭb*.

2.1. Words in South Arabic and Arabic

- 'qd*: Mh. *'aḍadit* 'arm'; see *'qd*.
'gh: Šh. *'egh* 'face'; see *wḡh*.
'grz: Mh. *'aḡrêz* 'testicles'; see *'grz*.
'qd: Šh. *'aḍedit* 'arm', Mh. *'aḍadit*; Ar. *'aḍd*, *'aḍid*; for the relation between this root and Ar. *'iḍād* 'door-post', see Holma, *Körperteile* 116 n.2.
'grz: Šh. *'agriz* 'testicles', Mh. *'aḡrêz*; to be compared perhaps with Ar. *'aḡz*, *'uḡz* 'posterior'. For the quadriliteral root lengthened by *r*, see Fraenkel, *Beiträge* 16 ff, Staude, *Über den Ursprung der mehrlautigen Thatwörter der Ge'ez-Sprache* 21 ff.
'ngr: Soq. *'angher* and *'angher* 'posterior', Šh. *'eñqerert*; Yem. *naqa* (Stace, *An English-Arabic vocabulary* 16 under 'backside').
brk: Soq. *berak* 'chest'; Ar. *bark* 'chest (of a man and of an animal)', probably from *brk* 'to kneel down', and means 'the part of the body which touches the earth when the animal kneels down'; Mh. *birek* 'in' is to be derived from *bark* 'chest' rather than to be considered as a metathesis of Akk. *qirbu* 'interior' as in Bittner, Mh. St. IV. 10.
dr: Soq. *dur* 'blood'; see *ḍr*.
dśś: Mh. *diśśet* 'body'; Dof. *ḡiśś(y)a*, to be compared with Soq. *gitteh* 'corpse', Šh. *giśśit* 'rib', Ar. *ḡutta* 'body'. The Mh. *diśśet* represents the dissimilation *ḡs* > *dś* (see Brockelmann, *Grundriss* I.235).
ḍr: Šh. *ḍor* 'blood', Curia *ḍor*, Mh. *ḍore*, Hars. *dora*, *ḍureh*, Soq. *dur*; Ar. *darra* 'to flow', *dirra* 'blood', perhaps also Akk. *darāru* 'laufen, sich verlaufen (vom Wasser)', see B. Meissner, *Beiträge zum assyrischen Wörterbuch* I.42. It is to be noted that the modern South Arabic languages have *ḍ* instead of the Arabic *d*.
fḡr: Mh. *fuḡrait* 'nostril'; see *fḡr*.
fḡr: Šh. *finḡarot* 'nose', Hars. *fanḡirut* 'nostril', Mh. *fanḡarūt*, *fuḡarait* and *ṭunaiḡur*; Dof. *fenḡor* coming from *manḡor*, *m* > *f* before *n* (Brockelmann, *Grundriss* I.661 as opposed to Brockelmann op.cit. 481). A metathesis of this root is found in Algiers *ḡanfar* 'nostril'; for Daṭ *taḡanfara* 'to be proud', see Landberg, *Glos. Daṭ*. 656. See also *nḡrr*.
fqm: *faqam* 'mouth'; Ar. *fugum*.
frḡh: Soq. *fargaḡan* 'posterior'; the word is lengthened by *r*: Om. *foḡḡa* 'posterior' (Reinhardt, *Oman* 34 n.1).
gnḡ: Šh. *ginḡaḡ* 'wing'; Ar. *ḡināḡ*.
gtt: Soq. *gitteh* 'body'; see *dśś*.
ḡbh: Hars. *ḡibha* 'forehead'; Ar. *ḡubha*, to be compared with Hebr. *gāḡah* 'to be high', Akk. *gabū* 'high(?)'; Dietrich, *Abhandlungen* 137, compares Hebr. *gabbahat* 'baldness of the front'.
ḡwhr: Mh. *ḡuwēher* *hauleten* 'incisors', literally 'the first pearls' (*ḡuwēher* = Ar. *ḡayḡar* 'pearl', *hauleten* = Ar. *'awwaliyy* 'first').

- gbt*: Mh. *gabṭ* 'arm-pit'; Ar. *'ibt*, Ḥadr. *'ubṭ*, *'ubṭ* and *gubṭ* (Landberg, Ḥaḍramout 519), Om. *bāt*; Te. *habāt* is borrowed from Arabic.
- glf*: Mh. *gallaft* 'prepuce'; Ar. *gūlfa*, related with *qlf*: Ar. *qulfa* 'prepuce', Nhebr. *qelep* 'peel', Syr. *q'laptā*, Akk. *qilpu* (Holma, Körperteile 146). For the relation between *glf* and *qlf*, see also Landberg, Ḥaḍramout 485-6.
- hngr*: Mh. *hungarūt* 'throat', Šh. *hunḡarōt*; Ar. *hanḡara* 'larynx', Om. *hungra*; might be explained by *h* (*h*) agglutinated to the root *ngr* (*nḡr*) 'to speak' (Akkadian, Ethiopic). For the agglutinated *h* see above under *hlqm*, §2.
- hnḡr*: Šh. *hunḡarōt* 'throat'; see *hngr*.
- hdq*: Mh. *hadaqōt da ayn* 'pupil'; Ar. *hadaqa* 'pupil', also *hadlaqa* and *hadqal*; for *d* in Arabic, *ḏ* in Mehri, see above under *ḏr*.
- hsf*: Mh. *haṣfet* 'glans of the penis'; Ar. *haṣfa*.
- hff*: Šh. *haḥf* 'sole of the foot', Mh. *ḥuf*, Šh. *ḥuf* is also translated by 'foot' in Thomas, Hars. *ḥuf*; Ar. *ḥuff* 'sole of the foot'.
- kfr*: Mh. *me-kafirōt* 'penis'; Ar. *'al-kāfirāni* 'les aînes aux environs des parties naturelles' (Kazimirski).
- kmb*/' : Mh. *kmba* 'heel', Hars. *kimbai*, Šh. *kimbe*; Ar. *ka'b* 'heel' (Jahn, Mehri-Sprache 201). The words of the Souh Arabic languages are lengthened by the labial *m* in a root containing *b*.
- kr'l*: Soq. *kér'el* 'testicle'; Yem. *ku'alāh* (Goitein, Jemenica 54, Stace, Vocabulary 171), Ḥadr. *ka'al*, Daḡ. *ka'al* (Landberg, Glos. Daḡ. 1447), Ar. *ka'la* 'tail' (Dozy, Supplément aux dictionnaires arabes 474).
- nḥśś*: Mh. *naḥśśis* 'tip of the nose'; Ar. *naḥśśūš* 'nostril' (Dozy, op. cit. II.649.)
- ngr*: Šh. *'eṇqerert* (from *menqerert*?) 'posterior'; see *'ngr*.
- qdm*: Mh. *qademāt* 'leg'; Ar. *qadam* 'foot', Yem. Om. *qadam*, from the Sem. root *qdm* 'to advance'.
- qlb*: Mh. *qalb* 'heart', Šh. *qalab*; Ar. *qalb*; Holma, Körperteile 61 compares it with Akk. *qablu* 'midst'.
- rb*': Soq. *mrebe'oh* 'molar tooth'; Ar. *rabā'iyya* 'front tooth', from the root *rb* 'four'.
- raqb*: Mh. *raqabēt* 'neck'; Om. *raqbe*, Yem. *ragabah*, Ar. *raqab*.
- šl*': Mh. *šalayt* 'skull'; Bittner, Mh.St. I.61 compares it with Ar. *šul'a* 'the bald part of the head'.
- šf*: Soq. *šfeh* 'hair', Mh. *šfīt*, Šh. *šfet*, (*e*)*šfet*, Curia *šuf*, Hars. *šif*, Bot. *šafait*; Ar. *ša'f* 'hair'.
- šfr*: Mh. *šofer da ayn* 'lash', Šh. (*e*)*šferir*; Ar. *šafr*, perhaps also Amh. *šəfal*; Nöldeke, NBS 129, considers it as related to *šb* (*šp*) 'lip'; Ar. also *šanfara* 'one who has big lips'.
- šfrr*: Šh. (*e*)*šferir* 'lash'; see *šfr*.
- šḡrr*: Mh. *šaḡayrer* 'little finger'; Ar. *šuḡayyir* (Jahn, Mehri-Sprache 240), Ḥadr. *aṣṣāḡir*.
- šhd*: Mh. *šohod* 'fore-finger'; Ar. *šāhid* (see Goldzieher, Abhandlungen zur arabischen Philologie I. 56 n.1).
- šhm*: Šh. *šhamet* 'lobe of the ear'; Ar. *šaḥmatu-l-'uḏni* 'lobe of the ear', from *šaḥma* 'piece of grease'; for Akk. *šēmu* 'grease', see Albright RA 16.192.
- šrṣ*: Šh. *šeršet* 'temple', Mh. *širzayt*; Ar. *širṣ*.

- šrz*: Mh. *širzayt* 'temple'; see *šrs*.
tny: Soq. *mitnioh* 'tooth', Hars. (i)*mṭainen*; *amihaina* of Thomas, Four tongues, 97 is probably a misprint for *amithaina* = *amṭaina*; Om. *tene* 'to get teeth', Ar. *ṭaniyya* 'front teeth', from *ṭny* 'two'.
tnḥr: Mh. *ṭunaiḥur* 'nostril', represents *funaiḥur* (see *fnḥr*) with interchangeability of *t* and *f*; for this phenomenon in South Arabic and in the other Semitic languages, see Landberg, Ḥaḍramout 538, Glos. Daṭ. 244, Brockelmann, Grundriss I.232.
ṭhn: Šḥ. *me-ṭhant* 'molar tooth'; Ar. *ṭaḥina*, from the Sem. root *ṭhn* 'to grind, mill'.
wgh: Hars. *wugih*, (a)*wegga* 'face'; see *wḡh*.
wḡh: Mh. *waḡeh* 'face', Šḥ. *'egh*, Hars. *wugih*, (a)*wegga*; Ar. *waḡh*. For a possible relation between *wḡh* and *ngh* (Hebr. G. Soq.), see Nöldeke NBsS 196.
znd: Mh. *zend* 'forearm'; Ar. *zand*.

2.2. Words in South Arabic and Ethiopic

- 'mb*: Soq. *'amb* 'lung'; G. *sanbu*, Te. Tña. *sambə*, Amh. *sāmba* from *nb* 'to blow' (Dillmann, Lex. 370); for this root in the Cushitic languages, see Reinisch, Wörterbuch der Bilin-Sprache, 306.
brbr: Soq. *berberoh* 'thigh' (see also *'erbeboh*); Guragué *bärrä* 'thigh', Om. *barbur* 'penis' (Reinhardt, Oman, 55), Daṭ. Ḥaḍr. *barbur*. It is difficult to know in what genetic relation the words of the South Arabic dialects of South Arabia are to the word of Soqotri. For the relation between 'knee' and 'penis', cp. Akk. *birku* (Holma, Körperteile 95, and M. Cohen, Genou, famille, force dans le domaine chamito-sémitique, in Mémoires Henri Basset 204).
gys: Šḥ. *'eṇḡset* 'calf (of the leg)', perhaps for *'eṇḡset* (*'eñ-* represents the prefix *me-*), and to be compared with G. *qʷəys* 'tibia'. Holma, Körperteile 137 compares G. *qʷəys* with Akk. *qimšu* 'tibia, leg', but Leslau, JAOS 64.57 (1944) derives *qimšu* from the verb *qamāšu*, *kamāšu* 'to bend the knee' and compares it with Ethiopic *qmṭ* 'to sit down'.
ḥrff: Mh. Šḥ. *ḥarfif* 'face'; see *krff*.
krff: Mh. *karfiṭ* 'lip', Šḥ. *kurfóf* and *qifrir* 'face', Mh. Šḥ. also *ḥarfif* 'face'; probably to be compared with G. *kānfār* 'lip' (also Jahn, Mehri-Sprache 201.)
qfrr: Šḥ. *qifrir* 'lip'; see *krff*.
qntr: Soq. *qanther* 'vulva'; Tña. *qənṭār*, Te. *qāntirūt*, Amh. *qinṭar*, Har. *kintir*, Guragué *qənṭər*; is also Cushitic, see M. Cohen, in Mélanges E. Boisacq 187-200.

3. Words Common to South Arabic and North Semitic

- f'm*: Bot. *fa'am* 'leg'; see *f'm*.
f'm: Šḥ., Curia *fa'am* 'leg', Bot. *fa'am*, Hars. Mh. *fām*; Hebr. *pa'am* 'pace, foot', Punic *p'm*, Ugar. *p'n*; for Akk. *pēmu*, see Albright in RA 16.188.
gśś: Šḥ. *giśšit* 'rib'; Akk. *giššu* 'hip, side', Aram. *gissā*; for the last two languages, see Albright in RA 16.180; see also here under *dśś* and *gtl*.
ḡyd: Šḥ. *ḡiyod* 'nerve', Soq. *ḡid*; Hebr. *ḡīd*, Syr. *ḡyādā*, Akk. *ḡidu*.

hff: Soq. *hafen* 'lap' from *hff* with the ending *-en*; Akk. *ipu* 'lap', from *hff* 'to surround' (Ar. *ḥaffa*, Hebr. *ḥāpāp*) rather than from Ar. 'afā 'to forgive' proposed by Holma, *Körperteile* 105, for Akk. *ipu*. Albright, RA 16.176 identifies Akk. *ipu* with *ippu* 'fulness, abundance' and compares it with Ar. *wfy* 'to be complete, abundant'.

n': Mh. *nā'it* 'dug', Soq. *ni'ih*; see *n'*.

n': Šh. (e)*n'et* 'dug', Mh. *nā'it*, Soq. *ni'ih*; Aram *ni'ā* 'breast', Syr. *nā'ā*.

šbh: Soq. *šibah* 'foot'; represents the lengthening by *h* of *šab* (see *šb*).

šh: Šh. *'eñšhot* 'arm-pit'; see *šh*.

šb: Soq. *šab* 'foot'; see also *šibah*; Akk. *šēpu* 'leg' (Halévy, *Rev. Sem.* 1905, p. 285); Streck, *Babyloniaca* I.218 n., derives Akk. *šēpu* from *šāpu* 'to stamp'. For the root in the Cushitic languages, see Leslau, *Lex. Soq.* 424.

šh: Soq. *šho* 'armpit', Šh. *'eñšhot*; Akk. *šahātu*, Nhebr. *š'hī*, Syr. *š'hātā*; for Hebr. *š'hut* 'excavation' from *šhy* 'to throw down', see Brockelmann, *Lex. Syr.* 768.

šr(y): Soq. *širhi* 'skin'; Hebr. *š'er* 'flesh', Akk. *širu*, Ugar. *šir*.

žyd: Soq. *žid* 'nerve'; see *žyd*.

4. Words Found in South Arabic, Akkadian, and Ethiopic

hn: Soq. *hant* 'belly'; Akk. *hānu* 'part of a sacrificed animal', Te. *hanot* 'embryo'; also Cushitic: Bil. *hanot*, Chamir *huenot*.

knbst: Šh. *kinubset* 'shoulder' (Thomas) from *kinset*, *kinsed* with intercalated *b* as in Šh. *tib'alot* 'worm', root *tl'*, *mnebzil* 'place' from *mnl*; see *knsd*.

knsd: Šh. *kensid* 'shoulder' and *kinubset*, Mh. *kenstt*; G. *kasad*, Te. *səgad*, Akk. *kišādu*.

knst: Mh. *kenstt* 'shoulder' for *kensid*, see *knsd*.

rth: Soq. *ritheh* 'muscle'; Akk. *retū* 'to erect, fortify, strengthen', G. 'artā'a 'to erect', Tña. *rāt'a* 'to win a cause'. The final *h* of Soq. represents a devoiced ' (Leslau, *Lex. Soq.* 19).

5. Words Found in South Arabic Only

In this section appear words (5.1) that have no correspondence in the other Semitic languages, but can be explained etymologically by some Semitic root, as well as words (5.2.) that have no Semitic etymology. Some words of the latter category have a modern South Arabic etymology.

5.1. Words That Have a Semitic Etymology

'fl: Soq. *'efel-oti* 'stomach' (*-oti* is the feminine ending of the dual in Soqotri); probably to be compared with Ar. 'afal 'the fat on the thigh of the animal'.

'md: Soq. *'eymed* 'head', literally '(that) what is leaned upon', from *'md* 'to lean upon' (Leslau, *Lex. Soq.* 313); Ar. *'amada*, Hebr. *'ammūd* 'pillar', G. *'amada* 'to support with a pillar', South Ar. *'md* 'pillar', Akk. *emēdu* 'to support'.

'ns: Soq. *'ans* 'elbow'; Bittner, *Charakteristik* 14, compares it with Ar. *'anasa* 'to bend'.

- 'sgl ('zgl): Soq. 'asgel, 'azgehel 'penis'; is perhaps in relation with Ḥaḍr. *guzla* 'genital parts' mentioned in Landberg, Ḥaḍramout 486.
- drm: Soq. *medrem* 'heel', Mh. *umdaraim*, *imduraim* 'heel, ankle', Hars. *undaraim*, Šh. *eñdrim*, *aidarum*, *aindarum*; Ar. *darima* 'to be rounded (heel)'.
- drz: Soq. *duraz* 'stomach', *derz* 'intestine'; to be compared probably with Ar. *dirš* 'foetus (of a cat, rat)'.
- dšr: Mh. *dišor* 'chest'; see *ššr*.
- fhr: Šh. *fahar* 'foot' (Thomas); to be compared perhaps with Ar. *fahara* 'to limp'.
- frfr: Šh. *ferfir* 'feather', Hars. *firfayir*, Soq. *nferer* 'wing'; Dof *ferfur*, from *frr*, *frfr* 'to fly, flee': Mh. *farr*, Šh. *ferr* 'to fly, jump', Ar. *farra* 'to flee', Syr. *farr*, Amh. *bärrärä* 'to fly', Har. *bärärä*, Tna. *färärä*, Om. *farfar*, Ar. *farfara* 'to swing', Nhebr. *pirper*, Syr. *parpar*.
- frr: Soq. *nferer* 'wing'; a noun of instrument from *frr* (see *frfr*) with *n* instead of *m* by dissimilation before the labial *f* (see Leslau, Lex. Soq. 40 n. 1).
- fzh: Šh. *fizḥait* 'forehead'; is perhaps to be compared with Hebr. *meṣaḥ* 'forehead'.
- gbb: Šh. *gibb* 'pudenda'; the comparison by Bittner, Šh.St. I.13 with Ar. *ḡubb* 'cistern' is very doubtful. The Šh. *gibb* might perhaps be compared with Ḥaḍr. *ḡa'ba* 'buttock'.
- ggr: Soq. *gozir* 'posterior'; perhaps from *ggr* 'to cut', *gozir* would mean 'extremities'.
- ḡl: Mh. *ḡilot* 'clitoris'; perhaps to be compared with Ḥaḍr. *ḡala'a* 'to pull down the prepuce'; Jahn, Mehri-Sprache 180, compares it with Ar. *ḡali'a* 'to be obscene'.
- ḡšr: Mh. *ḡišor* 'chest', also *dišör* (for *ḡš* dissimilated into *dš*, see under *dšš*); is perhaps to be compared with Ar. *ḡašam* 'belly' and 'chest', *ḡayšan* 'chest'.
- ḡdr: Šh. *eñḡdert* 'hip, loin'; perhaps to be connected with the Sem. root 'ṭr 'to surround'.
- hfl: Mh. *höfel* 'belly'; see *šfl*.
- hrqf: Šh. *herqefot* 'hip'; perhaps for *harqefot* from *hqf* (with a lengthening *r*) 'to embrace, surround' (Ethiopic). For a similar development of meaning, see Dillmann, Lex. 98, for *haqwe*.
- h('): Soq. *he* 'mouth'; see *h*'.
- hdq: Soq. *hadaqa* 'beard'; is perhaps to be compared with Akk. *idqu* 'Schaffell(?)', Syr. *'edqā* 'Locken' for which see Holma, Körperteile 141. These words might be in connection with Ar. *hadaqa* 'to surround'.
- hgl: Soq. *hagal* 'eyebrow', Šh. *hagel*, Mh. *hāḡel*; from the Semitic root *hgl* 'to surround': Syr. *hegal*, G. *hagl* 'tie', Ar. *hiḡl*, Soq. *hgl* (see Leslau, Lex. Soq. 162).
- hḡl: Mh. *hāḡel* 'eye-brow'; see *hgl*.
- hlf: Soq. *helefeh* 'eye', literally 'that which pierces', from the Sem. root *hlf* 'to be sharp, acute': Ar. *halif* 'sharp', NHebr. *halipot* 'knife'.
- hšk: Soq. *hošk* 'vulva'; Daṭ. *hašaka* 'to break in', Ar. *hašaka l-wa'a'a* 'remplir une boîte en pressant fortement les choses qu'on y met' (Dozy).
- h': Mh. *ho* 'mouth', Šh. *ho* 'mouth, entrance', Soq. *he*; Ar. *hawā'* 'empty

space' (Bittner, Šh. St. I.28); Brockelmann, art. Mehri in Enc. Islam III 506, col. b, compares it with Ar. *ḥayḥa* 'hollow'.

kmḥṣ: Mh. *kamḥuṣ* 'occiput'; is perhaps to be compared with Ar. *qamḥaduwa* 'occiput'.

krkz: Šh. *kirkiz* 'occiput'; might be compared with Hebr. *qodqod* 'skull' (Bittner, Šh. St. I.30), Akk. *qaqqadu*, Ugar. *qdqd*.

krm: Šh. *kurmo'a* 'heel'; see *grmh*.

mğr: Mh. *müğir* 'rectum'; perhaps to be compared with Ar. *mağr* 'foetus'.

n-frr: Soq. *nferer* 'wing'; see *frr*.

nsb: Soq. *minsub* 'genital parts', Mh. *menşabôt*; might be connected with Ar. *nisba* 'genealogy'.

nşṣ: Šh. *naş'aş* 'cheek'; perhaps to be connected with Ar. *naza'a* 'temple' with repetition of a radical (see also Bittner, Šh. St. I.29).

nşb: Mh. *menşabôt* 'genital parts'; see *nsb*.

nşf: Mh. *nşayfôt* 'bone from the knee up to the ankle'; Ar. *naşf* 'vigorous, robust' for which see Dozy, Supplément II.688; for the relation of the meanings, cp. Sem. *'aṣm* 'bone' from the root *'ṣm* 'to be strong'.

qhrr: Soq. *qehaireher* 'clavicle'; perhaps to be connected with Ar. *qahira* 'breast'.

qlz: Soq. *miqliz* 'penis'; perhaps to be compared with Ar. *kūsala* 'glans of the penis'.

qrdf: Šh. *qardef* 'pavilion of the ear'; Bittner, Šh. St. I.30 compares it with Ar. *quḍruf* 'cartilage'.

grf: Soq. *qarfe'ah* 'ankle, heel'; is to be compared with Mh. *qarafhêt* 'shoe', Ḥaḍr. *garafhe*, Som. *qarafi*; cp. perhaps also Šh. *qurmah*, *kurmo'a*, *qurōḥ*.

grmh: Šh. *qurmah*, *qurōḥ* 'heel', also *kurmo'a*; see *grf*.

qyd: Mh. (am) *qayyād* 'ring finger'; seems to be formed from the root *qyd* 'to bind, attach'.

rdb: Mh. (a) *rdīb* 'nape of the neck', Šh. (a) *rdeb*; Jahn, Mehri-Sprache 219 col. b, compares it with Ar. *dubr* 'back', but it is rather to be compared with the root *rdf* 'to be behind': Ar. *radafa*, Hebr. *rādap* 'to be behind, to run behind', Syr. *rḏap*.

rkd: Mh. *me-rkedêt* 'sole of the foot'; from the root *rkd*, *rkḏ* 'to stamp': Soq. Šh. *rekoḏ*, Dağ. *rkeḏ* 'to run, stamp', Ar. *rakada*, Syr. *rḡqaḏ*, Hebr. *rāqaḏ*, related with *rqz*, *rqḏ*.

rkn: Soq. *rekin* 'bone', Mh. *rêken da fām* 'anklebone'; is perhaps to be compared with Ar. *rakuna* 'to be firm, strong'. For the relation of the meanings, see above under *nşf*.

sql: Soq. *suqal* 'foot'; perhaps to be compared with Ar. *suql* 'flanc'.

srfr: Hars. *sarafūr* 'penis'; is perhaps to be compared with Ar. *surm* 'anus', Akk. *surummu*.

şfl: Šh. *şofel* 'belly', Mh. *hōfel*; from the Sem. root *şfl* (*sfl*) 'to be low', in Soq. *şfl* 'to despise': Hebr. *šāpeḥ*, Ar. *safila*, Syr. *šḡpal*, South-Ar. *sḡpl*, Akk. *šapālu*, Ugar. *şfl*. For Akk. *šapulu* and Ar. *sāfila* 'lower parts of the body', see Holma, Körperteile 161.

şm: Mh. *mişma* 'pavilion of the ear'; from the Sem. root *sm* (*şm*) 'to hear'.

- šrs*: Šh. *šeris* 'hoof', Soq. *šers*, *šerz*; Bittner, Šh. St. I.45, explains it by Ar. *šaraš* 'incision of the upper part of the nose'.
- šrz*: Soq. *šerz* 'hoof'; see *šrs*.
- š'b*: Soq. *ši'ub* 'sinew', see also *šeb* 'artery'; probably to be connected with Ar. *ša'aba* 'to disjoin, split'.
- š'l*: Soq. *ša'al* 'tooth'; to be explained by the root *shl* (G. Amh.) 'to sharpen', Akk. *šēlu*. Cantineau in *Revue Africaine* 1939, p. 144, is rightly opposed to the comparison with the Sem. *šnn* (*snn*) given by Leslau, *Lex. Soq.* 431.
- šb*: Soq. *šeb* 'artery'; see *š'b*.
- šrq*: Soq. *šorq* 'hair', literally 'that what is combed', from Soq. Šh. *šrq* 'to comb', Aram. Syr. *s'raq*, Mh. *mišrēq* 'comb', Hebr. *masreḡ*, Ar. *sarāqa* 'to split'.
- štr*: Mh. *šōter* 'posterior'; probably to be compared (with Jahn, *Mehri-Sprache* 242) with Ar. *šaṭr* 'half'.
- tdh*: Soq. *ṭadah* 'back'; might be from the root *ṭdhḥ* (*ṭbdḥ*) or *dhdḥ*, and to be compared perhaps with Akk. *ṭuḥdu* 'abundance, fat, grease'.
- zlfh*: Mh. *zalfēḥōt* 'bone below the clavicle'; probably to be connected with Ar. *šafḥ* 'flank'.

5.2. Words Found in South Arabic Only, Without Semitic Etymology

- 'rbb*: Soq. *'erbebōh* 'reins, lap, thigh, knee'; the ' is prothetic, see under *rbb*.
- 'fn*: Soq. *ma'fēnoh* 'lap'; derived from the South Arabic root *'fn* (Soq.), *ḡfn* (Mh.) 'to cover'. For the relation of the meanings, see under *hff*.
- 'rnk/q*: Soq. *'aronik*, *'aroniq* 'calf (of the leg)'.
- dq*: Šh. *dage* 'hand' (Thomas); see *dgs*.
- d't*: Soq. *ḍa'et* 'fist', from Soq. *ḍo'et* 'to seize' (Leslau, *Lex. Soq.* 363); might be related with Ar. *'adgaṭa* 'pressit, compressit trudendo' for which see Dozy, *Supplément aux dictionnaires arabes* II.10.
- dḡs*: Šh. *ḍaḡs* 'hand', also *dage* (Thomas); the root of these words seems to be *dḡs* (*dgs*) with omission of the final *s* > *h*, and can hardly be compared with Soq. *ḍa'et* 'fist' or with Ar. *diḡṭ* 'Handvoll Gras' as in Bittner, Šh. St. I.22.
- dṭm*: Soq. *ḍaṭem* 'arm', also *ḍaṭem*.
- glms*: Soq. *gelmes* 'tooth', from the root *gms*: Soq. *gimses* 'one who has twisted teeth'.
- gndb*: Soq. *gindēbeh* 'abdomen'.
- ḡsf*: Soq. *geśf* 'rib', Šh. *geśf* 'body, rib'; might be explained by a crossing of the roots *ḡtt* 'body' (Ar. *ḡutta*, Mh. *dišset*, Soq. *gitteḥ*) and *ḡwf* 'body' (Hebr. *gūp*).
- ḡḍ*: Mh. *ḡōḍi* 'neck'; see *ḡt*.
- ḡḍb*: Mh. Šh. *ḡoḍub* 'corpse' (Thomas). The transcription of Thomas used for this word could also be interpreted as being for *ḡoṣub*.
- ḡḍf*: Mh. *mhaḡaḍafūt* 'fist'; Bittner, Mh.St. I.82, derives it from Mh. *ḡaḍōf* 'falten > ballen'.
- ḡtk*: Mh. *ḡatkayt* 'popliteal depression behind the knee joint'.
- ḡt*: Šh. *ḡoṭ* 'neck', Mh. *ḡoṭi* and *ḡōḍi*, Hars. *ḡoṭi*.
- hll*: Mh. *ḥall* 'canine tooth', Soq. *ḥaulhel*.
- knd*: Šh. *mkindot* 'thumb'.

kr: Soq. *kereh* 'bone of the arm (of the animal)'.

krrn: Mh. *karân* 'vagina'.

kz: Soq. *kozi* 'wing, shoulder'; perhaps to be compared with Bilin *kozi* 'shoulder', but see Leslau, *Lex. Soq.* 216. For the meanings 'wing, shoulder', see under *kṭf*.

nṣr: Soq. *naṣar* 'cheek'.

qhl: Šh. *qaḥlot* 'pupil'; perhaps for *kaḥlot* and to be compared with the root *khl* 'to be blue, dark'.

qlhm: Soq. *qalḥemoh* 'bone of the skull'.

qmbr: Šh. *qimbeher* 'hoof'.

qmś: Soq. *qmešoh* 'anus'(?).

grf: Soq. *miqrifoh* 'scapula'; is perhaps to be compared with Somali *garab* 'shoulder, back', Te. *gurbat*, Amh. *ġārba*. The form of the Soqotri word can be a passive participle of the root *grf*.

qrmm: Soq. *qarmehem* 'finger'.

qšrb: Soq. *qašereboh* 'head(?)'.

qtl: Soq. *qotl* 'breast'.

r't: Soq. *ra't* 'hair'.

rbb: Soq. *reboboh* 'knee', 'erbeboh 'reins, thigh, lap'; is perhaps in relation with *berberoh*, see *brbr*.

rkb: Soq. *di-rikob* 'bowel', also *di-riqob*.

rqb: Soq. *di-riqob* 'bowel', also *di-rikob*.

rqd: Soq. *riqadeh* 'rate'.

rqs: Soq. 'irqiš 'dug'.

rsk: Soq. *mirsek* 'anklebone'.

rṭḥ: Mh. *morteḥât* 'middle-finger'.

sbll: Soq. *sêbelêloh di mi'ho* 'crow'.

šftt: Soq. *di-šafiṭaṭ* 'reins'.

šhl: Soq. *šeḥloh* 'bone'; Cantineau, *Revue Africaine* 1939, p. 144, rightly expresses some doubts about my etymological explanation in *Lex. Soq.* 347.

šlf: Soq. *šalfiye* 'neck'.

š': Šh. *šo* 'back', Soq. *šiho*.

šbrr: Soq. *šiberher* 'vertebra (of fish)'.

šġlf: *šaġalfôt da haydên* 'lobe of the ear'.

šh: Soq. *šiho* 'back', Šh. *šo*.

šqdd: Soq. *šiqdid* 'reins'.

šġm: Mh. *šaġimîṭ* 'cheek'.

škf: Soq. *di-škef* 'stomach'.

t'tḥ: Soq. *te'taḥ* or *te'taḥ* 'bone'.

tlf: Soq. *mottlif* 'flesh of the entrails'.

tšf: Mh. *tšafi* 'elbow'; the consonantic structure is strange.

whr: Mh. *wehrîṭ* 'umbilical cord'.

THE CONSONANTAL STRUCTURE OF THE NAMES OF THE PARTS OF THE BODY

Concerning the consonantal structure of the names of the parts of the body, it is to be noted that there are biliteral, trilateral, and quadrilateral roots.

The quadriliteral roots may consist of:

(a) four different radicals (1.2.3.4.): Mh. *kamhûş* 'occiput', Soq. *qanther* 'vulva' (root *qntr*).

(b) a repeated biliteral root (1.2.1.2.): Soq. *berberoh* 'thigh'; Šh. *ferfer* 'feather'; Soq. *gemgemoh*, Šh. *ginguñt* 'head'.

(c) a trilateral root with repetition of the last radical (1.2.3.3.): Soq. *figeriroh* 'neck'; Mh. Šh. *harfif*, *karfif* 'lip'; Mh. Šh. *naħrir*, Soq. *naħrir* 'nose'; Soq. *gehairher* 'clavicle'; Soq. *qarmehem* 'finger' (for the *h* in the last two examples, see Leslau, Lex. Soq. 22); Šh. (*e*)*şferir* 'lash'; Soq. *şiqdid* 'reins'; Mh. *şagayrer* 'little finger'.

(d) a trilateral root with repetition of the 2d radical (1.2.3.2.): Šh. *naş'aş* 'cheek'; Hars. *sarfur* 'penis'.

(e) a trilateral root lengthened by the liquid *r*, rarely *l*: Hars. '*arqaib* 'heel'; Šh. '*agriz*, Mh. '*ağrêz* 'testicles'; Soq. *fargaħan* 'posterior'; Šh. *harqefot* 'hip'; Soq. *kere'el* 'testicles'; Soq. *gelmeh* 'tooth'; Mh. *zalfehôt* 'bone below the clavicle.'

(f) a trilateral root lengthened by the initial ' or *h* before a liquid or nasal: Soq. '*erbêboh* 'reins, lap, thigh'; Soq. '*angher* ('*angher*) 'posterior'; Soq. '*ilbib* 'heart', Mh. *ħalbib*, *howbib*. Some of the biliteral and trilateral roots are also lengthened by *h*, especially in Mehri, Botahari and Harsusi: *heyd* 'hand', *here* 'head', and many more.

(g) a trilateral root lengthened by *m*: Šh. *talħim* 'milt'; Šh. *ħalqoñt* (*ħlqm*) 'throat'.

(h) a trilateral noun formed with the prefix *m-* of the noun of instrument: Soq. *medrem* 'heel', Mh. '*umdaraim*; Mh. *merkedet* 'sole of the foot'; Mh. *mişma* 'pavilion of the ear'; Soq. *mitnioh* 'tooth'; Soq. *nferer* 'wing'; Šh. *malħau* 'molar tooth', etc.

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(Words with the prefix *me-*, *eñ-* are to be found under one root.)

abdomen, Soq. *gindêbeh*

ankle, Mh. '*umdaraim*, Šh. '*aidirûm*, '*aindarum*, '*eñdrim*, Hars. '*arqaib*, '*undaraim*; see also 'heel'

anklebone, Soq. *mirsek*, *qarfe'ah*, Mh. *rêken da fâm*

anus, Soq. *qmeşoh*

arm, Mh. '*aḏadit*, Šh. '*adedit*, Soq. *ḏatem*

fore—, Mh. *zend*, Šh. *ḏira'*

bone of the —, Soq. *kereh*

armpit Soq. *şho*, Šh. '*enşhot*, Mh. *ḡabḷ*

artery, Soq. *şeb*

back, Šh. *šo*, Soq. *şiho*, *ṭadaħ*, *şalfiye*, Mh. '*aṭamit*

beard, Soq. *ħadaqa*, *diqehon*, *laħyet*, Mh. *leheyit*

belly, Mh. *hōfel*, Šh. *şofel*, Soq. *ħant*, *mer*; see 'stomach'

blood, Soq. *dur*, Mh. *ḏore*, Šh., Curia *ḏor*, Hars. *ḏora*, *ḏureh*

body, Soq. *gitteh*, Mh. *bedên*, *dişset*, Šh. '*eden*, *geşf*; see 'corpse'

bone, Soq. *rekin*, *te'taħ*, *şehloh*, Mh. '*aḏayd*, Šh. '*aḏud*, Hars. '*aḏaid*

— of the arm (of an animal), Soq. *kereh*

- of the skull, Soq. *qalhemot*
- below the clavicle, Mh. *zalfəhōt*
- from the knee to the ankle, Mh. *nəyḡfōt*
- bowel, Soq. *di-rikob*, *di-riqob*, Mh. *ma'wīn*; see 'intestine'
- breast, Soq. *qoll*, *todi*, 'aṭab, Mh. *tōdi*, *wōṭob*, *yōṭob*, Šh. *ṭedi*, 'eñṭebeta, 'eṭab; see 'dug'
- calf (of the leg), Soq. 'aronik, 'aroniq, Šh. 'eñḡset (see *gys*)
- cheek, Mh. *šaḡimīt*, Šh. *naṣ'aṣ*, Soq. *naṣar*, *malaḥi*
- chest, Soq. *berak*, *gehe*, *kho*, Šh. (e)*gehe*, Mh. *ḡišōr*
- chin, Mh. *leḡeyt*, Šh. (e)*lḡyet*
- clavicle, Soq. *qehairher*
- bone below the —, Mh. *zalfəhōt*
- claw, see 'nail'
- clitoris, Mh. *ḡilōt* (see *ḡl'*)
- corpse, Soq. *gitteh*, Šh. *ḡinozit*, *ḡoḡub*, Mh. *ginozit*, *ḡoḡub*, Har. *ginizat*
- crow (part of the intestine), Soq. *sēbelēloh di mi'ho*
- dug, Soq. 'irḡiṣ, 'aṭab, ni'ih, Mh. na'it, Šh. 'eṭob, (e)n'et; see 'breast'
- ear, Soq. 'idihen, Mh. *hayḏīn*, Šh., Curia 'iḏen, Hars. *hayiḏi*,
pavilion of the —, Mh. *mišma*, Šh. *qarḏef*
- lobe of the —, see 'lobe'
- elbow, Soq. 'ans, Mh. *tšafi*, Šh. *kimbe*
- entrails, flesh of the —, Soq. *mollif*
- eye, Soq. *helefeh*, 'ayn, Mh. 'ayn, Šh., Curia 'ayn, Hars. 'aine, Bot. 'ain
—brow, Soq. *ḡagal*, Mh. *ḡaḡel*, Šh. *ḡagel*
—lash, Mh. *šōfer da ayn*, Šh. (e)*šferir*
- face, Soq. *fane*, Šh. 'egh, *fenne*, *kurfof*, *ḡarfif*, Mh. *waḡeh*, *fenne*, *ḡarfif*, Hars.
(a)*wegga*, *wuḡih*; see also 'lip'
- feather, Šh. *qetuf*, *gutuf*, *ferfir*, Mh. *quttuf*, *gutafif*, Hars. *firḡayir*, *šafit*
- fin (of a fish), Mh. 'aḡayḡ
- finger, Soq. *šobeh*, 'eṣbah, *qarmehem*, Mh. *hašeba*, Šh. 'iṣba', *šba*, Hars. *hašaba*
little — Mh. *šaḡayrer*
middle —, Mh. *morteḡāt*
fore—, Mh. *šōhod*, (am)*qayyād*
- fist, Mh. *mḡaḡaḡafūt*, Soq. *ḡa'et*
- flesh of the entrails, Soq. *mollif*
- foot, Soq. *šab*, *šibah*, *suḡal*, *šer'ehan*, Mh. *qademāt*, *fām* (see *f'm*), *ḡuf*, Šh. *fa'am*,
fahar, *ḡuf*, Curia *airkot*, Hars. *ḡuf*; see also 'leg' and 'sole of the foot'
- forearm, Mh. *zend*, Šh. *ḡira*
- forehead, Soq. *fio*, Mh. *ḡeṣṣōt*, *ḡuzaṭ*, Šh. *ḡeṣṣet*, *fizḡait*, Hars. *ḡuṣsut*, 'iḡṣoṣ, *ḡibha*
- genital parts, Soq. *minsub*, Mh. *menṣabōt*
- hair, Soq. *ra't*, *šorg*, *ša'ihor*, *šfeh*, Mh. *šftt*, Šh. *šfet*, Curia *šuf*, Hars. *šif*, Bot. *šafait*
- hand, Soq. 'ed, *riḡoh*, Mh. *ḡeyd*, Šh. 'ed, *ḡaḡs*, *dage*, Curia *yed*, Hars. *ḡait*
palm of the —, Mh. *riḡōt*
back of the —, Mh. *keff*
- head, Soq. *re*, *rey*, *ḡemḡemoh*, 'eymed, *qašereboh*, Šh. *reš*, Curia *ereš*, Mh. *ḡere*,
Hars. *ḡiri*, Bot. *ert* (see *r'š*); see 'skull'

heart, Soq. *'ilbib* (see *lbb*), Mh. *galb*, *ħalbib*, *ħowbib*, Šh. *'ub*, *qaleb*, Hars. *ħalbib*
 heel, Soq. *medrem*, *garfe'ah*, Šh. *'eñdrim*, *kimbe'*, *kurmo'a*, *qurmah*, *qurōh*, Mh.
kmba', Hars. *kimbai*; see also 'ankle'

hip, Soq. *moten*, *monħeş*, Mh. *wirkît*, Šh. *'erk*, *hargefot*; see also 'loin, reins'

hoof, Soq. *şers*, *şerz*, Šh. *şeris*, *qimbeher*

horn, Soq. *qan*, Mh. *qôn*, Šh. *qun*, Hars. *qon*

intestine, Soq. *mi'ho*, *kelo'ih*; see 'bowel'

kidney, Mh. *kelît*, Šh. *kulyet*

knee, Soq. *rebóboh*, *'erbéboh*, *berk*, Mh. *bark*, Šh. *(e)rkebet*, Hars. *barik*

—cap, Mh. *karzeyn*

lap, Soq. *'erbéboh*, *đanaħ*, *zanaħ*, *ħafen* (see *ħff*), *ma'fénoh*

lash, see 'eye'

leg, Mh. *şrayn*, Šh. *kirşenot*, Curia *fa'am*, Hars. *fam* (see *f'm*), Bot. *fa'am*; see
 'foot'

lip, Soq. *şebēh*, Mh. *karşif*, Šh. *qifrir*, Hars. *şaibit*; see 'face'

liver, Soq. *şibdeh*, Šh. *şibdit*, Mh. *şebēdît*, Hars. *şebdit*

lobe of the ear, Mh. *şagalfôt da hayden*, Šh. *şhamet*

loin, Šh. *'eñğđert* (see *ğđr*); see also 'hip, reins'

lung, Soq. *'amb*, Šh. *'eri*, *kili*, Hars. *'arit*, *kilayitin*

milt, Soq. *riqadeh*, Mh. *talħaym*, Šh. *talħim*

mouth, Soq. *faqam*, *ħe*, Mh. *ħo*, Šh. *ħo*

muscle, Soq. *ritħeh*

nail, Soq. *ţifer*, Mh. *ţayfēr*, Šh. *ţefer*

nape of the neck, Soq. *figeriroh*, Mh. *(a)rdîb*, *guıma*, Šh. *(a)rdeb*, *gurmo*, Hars.
ħorit; see 'neck'

navel, Soq. *şirah*, *şirah*, Mh. *şira'*

neck, Soq. *figeriroh*, *qar*, *'arib*, Mh. *raqabêt*, *qar*, *ğôđi*, Hars. *ğotî*, Šh. *ğot*; see
 'nape of the neck' and 'throat'

nerve, Soq. *żid*, Šh. *ğiyod*

nose, Soq. *naħrir*, Mh. *naħrîr*, Šh. *naħrir*, *finħarot*, Curia *nuħurir*, Hars. *(i)nħarir*,
 Bot. *nuħarir*; see 'nostril'

tip of the —, Mh. *naħşîş*

nostril, Mh. *fanħarât*, *ţunaiħur*, *fuħarait*, Hars. *fanħirut*; see 'nose'

nymphae, Mh. *menşabôt*, Soq. *minsub*

occiput, Mh. *kamħûş*, Šh. *kirkiz*

penis, Soq. *faħal*, *miqliz*, *'asgel*, *'azgehel*, Mh. *fahl*, *şit*, *mekafirôt*, Šh. *faħal*, Hars.
faħal, *sarafür*

glans of the —, Mh. *ħaşfet*

popliteal depression behind the knee joint, Mh. *ğatkayt*

posterior, Soq. *gozir*, *fargahan*, *'angher*, *'angher*, Mh. *şôţer*, Šh. *şit*, *eñqerert* (see
nqr)

prepuce, Mh. *gallaft*

pudenda, Šh. *gibb*, *'erket*

pupil, Mh. *ħadağôt da 'ayn*, Šh. *qaħlot*

rectum, Mh. *mūğîr*

reins, Soq. *şiqdid*, *'erbeboh*, *di-şafitât*; see 'hip, loin'

- rib, Soq. *gešf*, *ḡalḡ*, Mh. *ḡala'*, Šh. *ḡela'*, *giššit*
 scapula, Soq. *miqrifoḡ*
 shoulder, Soq. *kozi*, Mh. *kensūt*, Šh. *kensid*, *kinsait*, *kinubset*, Hars. *kitif*
 sinew, Soq. *ši'ub*
 skin, Mh. *ḡeld*, *ḡot*, Šh. *god*, Curia *gud*, Soq. *gad*, *širhi*
 skull, Šh. *gimḡuñit*, Mh. *ḡalayt*; see 'head'
 bone of the —, Soq. *ḡalḡemot*
 sole of the foot, Mh. *merkēdēt*, Šh. *ḡaff*; see 'foot'
 stomach, Soq. *šeres*, *duraz*, *mer*, *ḡant*, 'ešelóti, *di-škef*, Mh. *hōfel*, *qabit*, Šh. *šofel*;
 see 'belly'
 tail, Mh. *ḡenōb*, Šh. *ḡenub*, Soq. *dinob*
 tear, Mh. *demōt*, Šh. *dim'et*, Soq. 'edmi'a
 temple, Mh. *širzayt*, Šh. *šerset*
 testicle, Soq. *kere'el*, Mh. 'aḡrēz, Šh. 'agriz
 thigh, Mh. *kurštn*, *faḡed*, Šh. *fakaid*, *fuḡud*, Soq. *berberoh*, *erbeboh*, *faḡid*, Hars.
 'ifkad
 throat, Mh. *kart*, *raqabēt*, *ḡoḡi*, *hungarūt*, Šh. *ḡot*, *ḡalḡoñit*, *hunḡarot*, (i)*kayart*,
 Hars. *aqarit*, *aqart*; see 'neck'
 thumb, Mh. *ḡābṡn*, Šh. *mkindot*
 tongue, Soq. *lešin*, Mh. *lištn*, Šh. *lišan*, Hars. *laštn*, Bot. *lištn*
 tooth, Soq. *ša'al*, *gelmes*, *mitnioḡ*, Mh. *mḡarah*, Šh. *šunn*, Hars. (i)*mṡainen*
 canine —, Soq. *ḡaulhel*, Mh. *ḡall*
 incisor — Mh. *ḡuwēher hauleten*
 molar —, Soq. *mrebe'oh*, Mh. *ma-lḡau*, Šh. *meḡḡant*
 umbilical cord, Mh. *wehrt*
 vagina, Mh. *karān*
 vein, Mh. 'arḡ, Soq. *žid*
 vertebra (of fish), Soq. *šiberher*
 vulva, Soq. *ḡanther*, *ḡošk*
 waist, Mh. *ḡakou*
 wing, Soq. *kozi*, *nferer*, Mh. *kataf*, Šh. *ḡinaḡ*

PURE-RELATIONAL SUFFIXES AND POSTPOSITIONS IN HUNGARIAN

PAUL L. GARVIN

INDIANA UNIVERSITY

[The paper delimits the group of pure-relational suffixes by removing some morphemes that have hitherto generally been included in this group. An important morphological criterion of these suffixes, the oblique stem, is examined, and as a result of this examination pure-relational suffixes are divided into two classes: case suffixes and suffixed postpositions, the latter forming the transition from the case suffixes to the free postpositions.]

1. Substantival suffixes in Hungarian can be grouped into two classes, depending on the distribution of the composed forms consisting of a stem and the given suffix.¹ The first group of suffixes is formed by those whose composed forms can be replaced in an utterance not only by another composed form, but also by a single morpheme. Thus, the form /*nelvees*/ 'linguist', consisting of the stem /*nelv*/ 'language' and the suffix /*aa/ees*/ can be replaced in an utterance by another composed form /*vadaas*/ 'hunter', consisting of the stem /*vad*/ 'game' and the same suffix, by a composed form /*utaš*/ 'traveller', consisting of the stem /*ut*/ 'road, trip', and another suffix /*a/ole/oš*/, or by a single morpheme /*ember*/ 'man, person', e.g. /*eza nelvees najon okoš*/ 'this linguist is very clever'; /*eza vadaas najon okoš*/ 'this hunter is very clever'; /*ezaz utaš najon okoš*/ 'this traveller is very clever'; /*ezaz ember najon okoš*/ 'this man is very clever'.

The second group of suffixes is formed by those whose composed form cannot be replaced in an utterance by a single morpheme. Thus, the form /*emberek*/ 'men, persons', consisting of the stem /*ember*/ and the plural suffix /*k*/, can only be replaced in an utterance by another composed form such as /*assonok*/ or /*jerekek*/, e.g. /*az emberek ott voltak*/ 'the men were there'; /*az assonok ott voltak*/ 'the women were there'; /*a jerekek ott voltak*/ 'the children were there'. A composed form of this type can also be replaced by one containing another suffix. Thus, the form /*haazbool*/ 'from (inside) the house', consisting of the stem /*haaz*/ and the pure-relational suffix /*b^{oo}/ool*/, can be replaced by a form containing the same suffix /*kertb^{oo}ol*/, or by a form containing another suffix /*uccaarool*/, where the suffix is /*r^{oo}/ool*/, e.g. /*a haazbool jött*/ 'he came from

¹ A similar grouping is proposed by Thomas A. Sebeok, Finnish and Hungarian Case Systems: Their Form and Function (unpublished ms.), where he says: 'Following one of de Saussure's most fruitful constructs, . . . suffixes which are added to substantives may be grouped into two major classes. Those suffixes which function only on the axis of simultaneities form one group: such a suffix, for example, as *-x²⁻⁵* in a word like *nelvees* "linguist", irrespective of its function in an utterance, signifies its relation to the word *nelv* "language", which coexists in the same system. Suffixes of the other group, however, function both on the axis of simultaneities and the axis of successivities: such a suffix as *-x^{0k}*, in a word like *emberek* "men", signifies, for one thing, its relation to the word *ember* "man", which coexists in the same system, and, in the second place (as in the sentence *emberek kyldenek* "men send"), signifies plurality marked also by agreement in the verb (in opposition to *kyld* "sends").' This and other points of the present paper were discussed extensively with Sebeok, whose above-named monograph, in its Hungarian part, is of great interest to this discussion.

the house'; /a kertből jött/ 'he came from the garden'; /az uccsáról jött/ 'he came from the street'.

Sebeok² calls the first group of suffixes derivational suffixes, and the second group paradigmatic suffixes.

2. Pure-relational suffixes³ belong to the group of paradigmatic suffixes, because composed forms containing a pure-relational suffix can be replaced in an utterance only by other composed forms.

Lack of a clear-cut structural definition may have been the cause for the inclusion among pure-relational suffixes of morphemes which, in the light of what has been said, cannot be considered paradigmatic suffixes. Such morphemes are found in both Lotz's⁴ and Hall's⁵ lists of pure-relational suffixes, although Hall is more careful in his classification.

Sebeok⁶ has shown that Lotz's suffix #15, the temporal /kor/, is a free morpheme (the noun /kor/ 'age, period') added to the preceding stem to form a compound. Lotz's #22, the formal /keent/, resp. /keep/ or /keepen/, can be analyzed the same way as /kor/. /keep/ is a noun, and /keepen/ a noun with superessive suffix, meaning 'picture, mode, manner'; each may form a compound with the preceding stem. /keent/ would then be a morpheme alternant of /keep/ in compounding position. Sebeok⁷ calls Lotz's #16, the temporal iterative /nt^a/, a formative (denominative, distributive-repetitive) suffix, classing this suffix as derivational rather than paradigmatic. In the utterance, a composed form containing the temporal iterative suffix can be replaced by a single morpheme, which confirms the classification as derivational: /havonta haaromszor mek moziba/ 'I go to the movies three times a month'; /maama haaromszor mek moziba/ 'I'm going to the movies three times today'. Lotz's #23, the distributive /nkeent/, occurs in complementary distribution with the just mentioned temporal iterative, and is therefore its morpheme alternant, hence also a derivational suffix: /havonta/ 'per month', /hetenkeent/ 'per week'. Lotz's #21, the essive /u¹/, is not a pure-relational suffix but an adverb-forming suffix which mainly occurs with adjectives. Lotz's

² Vowel Morphophonemics of Hungarian Suffixes, SIL 2.47-50 (1943).

³ Cf. Edward Sapir, *Language* 107 (New York, 1921).

⁴ János Lotz, *Das ungarische Sprachsystem* 63, 66 (Stockholm, 1939). Lotz lists 24 suffixes under the heading Kasussuffixe in the following order, corresponding to an approximative semantic classification: 1. nominative 0, 2. accusative /t/, 3. inessive /b^a/, 4. elative /b^{oo}/, 5. illative /b^a/, 6. superessive /n/, 7. delative /r^{oo}/, 8. sublative /r^a/, 9. adessive /n^{aa}/, 10. ablative /t^{oo}/, 11. allative /h^o/, 12. locative /tt/, 13. terminative /ig/, 14. dative /n^a/, 15. temporal /kor/, 16. temporal iterative /nt^a/, 17. causal-final /eert/, 18. instrumental /v^a/ or final consonant repeated + /a¹/, 19. factive /v^{aa}/ or final consonant repeated + /aa^{oo}/, 20. sociative /št^u/, 21. essive /u¹/, 22. formal: (1) /keent/, (2) /keep/ or /keepen/, 23. distributive /nkeent/, 24. modality /l^a/.

⁵ Robert A. Hall Jr., *Hungarian Grammar* 32-33 (Baltimore, 1944). Hall groups the suffixes in 2 main classes: those requiring an auxiliary vowel (/n/, /t/ or /tt/, /nkeent/ /nt^a/), and those not requiring an auxiliary vowel. The latter are divided by the stem vowel morphophoneme contained: those containing x¹ (a. /ig/, b. /eert/), those containing x² (a. /u¹/, b. /b^{oo}/, /r^{oo}/, /t^{oo}/, /n^{aa}/, /v^{aa}/; c. /b^a/, /b^a/n/, /l^a/g/, /n^a/k/, /r^a/, /v^a/), and one containing x³ (/h^o/).

⁶ Loc.cit., footnote 2.

⁷ Op.cit.

example /kíraajul/⁸ 'in a royal way, royally' patterns with /neemetyl/ 'in German', which Lotz⁹ calls an essive case form. Lotz's view, however, seems rather far-fetched, since in the same place he considers the suffixes /^aeⁿ/ and /^la^{eg}/, which are obviously in complementary distribution with /^uy^l/ and have the same adverbial function, separate case suffixes and calls them modal and modality. It seems, however, difficult to establish any but distributional differences between the functions of these three suffixes in such cases as /neemetyl/ 'in German', /baatran/ 'bravely' and /matematikailag/ 'mathematically': they are added to various stems, but the resulting compound forms are mutually substitutable, and can also be replaced by a single morpheme, which classes these suffixes as derivational, e.g. /neemetyl iš lehet mondani/ 'it can be said in German, too'; /baatran iš lehet mondani/ 'it can be said bravely, too'; /matematikailag iš lehet mondani/ 'it can be said mathematically, too'; /ij iš lehet mondani/ 'it can be said this way, too'.

What has been said above eliminates, of course, Lotz's #24, the modality suffix /^la^{eg}/, from among the paradigmatic suffixes.

His #20, the sociative /št^uy^l/ is a compound derivational suffix, consisting of the adjective-forming suffix /^ao^oe/^oš/ and /t^uy^l/, which is a morpheme alternant of /^uy^l/ after /^ao^oe/^oš/. Thus, /čalaadoštul/ 'together with one's family' can be analyzed as /čalaadoš/ 'having a family' plus a morpheme alternant /t^uy^l/ of the adverbial suffix /^uy^l/.

Finally, Lotz's #12, the locative /tt/, is a morpheme alternant of the superessive suffix /n/ and the inessive suffix /b^aeⁿ/, whenever they are in complementary distribution, and is in free variation with either, being the less preferred variant, after a few stems denoting the names of certain cities, such as /peeč/ 'Pécs', /jðør/ 'Győr' and others: /peečen/ ~ /peečett/ 'in Pécs', /jðørben/ ~ /jðørøtt/ 'in Győr'.

Of Lotz's suffixes, therefore, only the following may be considered pure-relational: #1 nominative 0, #2 accusative /t/, #3 inessive /b^aeⁿ/, #4 elative /b^{oo}/øš^l/, #5 illative /b^ae^o/, #6 superessive /n/, #7 delative /r^{oo}/øš^l/, #8 sublative /^ae^o/, #9 adessive /n^{aa}/øš^l/, #10 ablative /t^{oo}/øš^l/, #11 allative /h^oe^o/øš^l/, #13 terminative /ig/, #14 dative /n^ae^k/, #17 causal-final /eert/, #18 instrumental /v^ae^l/, and #19 factive /v^{aa}/øš^l/.

3. A clue to the morphological analysis of these suffixes is given by Hall's statement that 'the place of the combination pure-relational suffix or postposition + personal pronoun is taken by a special form of the suffix or postposition (for which, in the case of the suffixes, a special "oblique" stem-form is used). This special form is made up of oblique suffix-stem or postposition + personal possessive endings.'¹⁰ Hall correctly notices that the oblique-stem forms of some of these pure-relational suffixes pattern similarly to postpositions, inasmuch as personal possessive endings can be added to them. In his classification of suffixes, however, Hall mentions this fact only casually by quoting the oblique stem after each suffix, or mentioning that a given suffix has no oblique stem.¹¹

⁸ This suffix occurs after noun stems only very rarely, mainly in bookish and archaic style.

⁹ Loc.cit. 91.

¹⁰ Loc.cit. 32.

¹¹ Ibid. 32-3. Lotz, incidentally, considers the special forms consisting of oblique

4. The occurrence of this oblique-stem form with pure-relational suffixes will be used as a criterion for their classification. In the following, these suffixes (excluding the nominative zero suffix) will be quoted in Lotz's order and their oblique-stem forms will be stated and analyzed.

ACCUSATIVE /t/. This suffix has no oblique stem. Accusative forms of the personal pronoun are formed for the pronoun of the third person, by adding the suffix /t/ to the stem in the singular: /øøt/, or with reduplicated suffix /øøtet/, and by adding the plural suffix /k/ and the suffix /t/ to the stem in the plural: /øøket/; for the pronouns of the first and second persons plural, by adding the suffix /t/ to a special morpheme alternant: /minket/, /bennynket/ for the first person, /titekett/, /bennetekett/ for the second person; for the pronouns of the first and second person singular by a special case form of the personal pronoun, to which the accusative suffix may be added: /engem/, /engemet/ for the first person, /teeged/, /teegedet/ for the second. All these alternant forms are in free variation.

INESSIVE /b^{a/e}n/. The oblique stem of this suffix is /benn/, which differs from the front allomorph of the suffix (the alternant with a front vowel) only by the reduplication of the final consonant. Personal possessive endings are added to this oblique stem as follows: /bennem/ 'in me', /benned/ 'in you', etc.

ELATIVE /b^{oo/øø}l/. The oblique stem of this suffix is /beløøl/, which is a reduplicated form of the front allomorph of this suffix. Personal possessive endings are added as follows: /beløølem/ 'from (within) me', /beløøled/ 'from (within) you', etc.

ILLATIVE /b^{a/e}/. The oblique stem of this suffix is /belee/, which is a reduplicated form of the front allomorph of this suffix with lengthened final vowel. Personal possessive endings are added as follows: /beleem/ 'into me', /beled/ 'into you', etc.¹²

SUPERESSIVE /n/. Hall¹³ gives as its oblique (suppletive) stem /rajt/. Since there is no formal similarity between /n/ and /rajt/, it is better to state that /n/ has no oblique stem, and that /rajt/ occurs in most of those positions where such an oblique stem can be expected to occur.

A formal similarity exists, however, between the suppletive form /rajt/ and the suffixes /r^{oo/øø}l/ and /r^{a/e}/. The analogy with the preceding set /b^{a/e}n/, /b^{oo/øø}l/, /b^{a/e}/ shows that in both cases there is the same initial consonant in all three suffixes so grouped, and that the vowels in the first and third suffix are the same (or similar: /a/e/ resp. /a/, and /a/e/). Viewed from this standpoint, the suffix /n/ itself, rather than the oblique stem /rajt/, would be suppletive.¹⁴

Another morphological property of the superessive to be noted in this connection is the fact that the superessive is the only pure-relational suffix which

suffix stem or postposition + personal possessive endings case forms of the personal pronouns, and their morphological nature is only hinted at in a note saying: 'Die obigen Formen zeigen Ähnlichkeit mit den Kasussuffixen und den unselbstständigen Adverbien, die mit Possessivsuffixen versehen werden' (loc.cit. 106-7).

¹² The long vowel in these forms can also be analyzed as the final short vowel of the oblique stem plus an initial short vowel of the personal possessive ending: /bele-em/, /bele-ed/, etc.

¹³ Loc.cit. 32.

¹⁴ This even more so, if the oblique stem is considered the basic form.

regularly occurs before certain postpositions, such as /tul/, /aat/, /kivyl/: /tengeren tul/ 'across the sea, overseas'; /a fojoon aat/ 'across the river'; /ezen kivyl/ 'aside from this, except for this'. Of these postpositions, only /kivyl/ occurs after the oblique-stem superessive with personal endings, and these forms (/rajtam kivyl/ 'aside from me, except for me') alternate with special forms in which the postposition /kivyl/ has personal endings and no superessive occurs next to it (/kivylem/ 'aside from me, except for me'). This distributional difference between the superessive suffix /n/ and the oblique-stem superessive /rajt/ underlines the distinction made between the two forms on other grounds.

DELATIVE /r^{oo}/øø/. The oblique stem of this suffix is /rool/, which is its back allomorph (the alternant with a back vowel). Personal possessive endings are added as follows: /roolam/ '(down) from me, about me', /roolad/ '(down) from you, about you', etc.

SUBLATIVE /r^a/e/. The oblique stem of this suffix is /raa/, which is the back allomorph of the suffix with lengthened vowel. Personal possessive endings are as follows: /raam/ '(towards) upon me', /raad/ '(towards) upon you', etc.¹⁵

ADESSIVE /n^{aa}/ee/. The oblique stem of this suffix is /naal/, which is its back allomorph. Personal possessive endings are added as follows: /naalam/ 'next to me', /naalad/ 'next to you', etc.

ABLATIVE /t^{oo}/øø/. The oblique stem of this suffix is /tøø/, which is its front allomorph. Personal possessive endings are added as follows: /tøølem/ 'from (next to) me', /tøøled/ 'from (next to) you', etc.

ALLATIVE /h^{oo}/e/øz/. The oblique stem of this suffix is /hozzaa/, which is the back allomorph with reduplicated final consonant and following long /aa/. Personal possessive endings are added as follows: /hozzaam/ 'to (next to) me', /hozzaad/ 'to (next to) you', etc.¹⁶

TERMINATIVE /ig/. This suffix has no oblique stem. Another morphological property of the terminative has to be noted here. It is the fact that the terminative can be added to oblique stems of other suffixes (and postpositions) + personal possessive endings: /hozzaamig/ 'until (next to) me, up to me', /melleemig/ 'until at my side, up to my side', etc.

DATIVE /n^a/ek/. The oblique stem of this suffix is /nek/, which is its front allomorph. Personal possessive endings are added as follows: /nekem/ 'to me', /neked/ 'to you', etc.

CAUSAL-FINAL /eert/. The oblique stem of this suffix is also /eert/. Personal possessive endings are added as follows: /eertem/ 'for me, for my sake', /eerted/ 'for you, for your sake', etc.

INSTRUMENTAL /v^a/el/.¹⁷ The oblique stem of this suffix is /vel/, which is its front allomorph. Personal possessive endings are added as follows: /velem/ 'with me', /veled/ 'with you', etc.

¹⁵ These forms can also be analyzed as /ra-am/, /ra-ad/, etc. cf. footnote 10.

¹⁶ These forms can also be analyzed as /hozza-am/, /hozza-ad/, etc. cf. footnote 10.

¹⁷ Sebeok calls this suffix comitative. The initial consonant /v/ of this suffix, and of the following suffix /v^{aa}/ee/, occurs only with vowel-final stems. With consonant-final stems, the /v/ is replaced by a consonant equal to the final consonant of the preceding stem.

FACTIVE /v^{aa}/ee/.¹⁸ This suffix has no oblique stem.

5. On the basis of the foregoing analysis, two groups of pure-relational suffixes can be established: those that have no oblique stems, and those that have one. In the first group would be classed the accusative /t/, the superessive /n/, the terminative /ig/, and the factive /v^{aa}/ee/. In the second group would be classed all the other suffixes. Two of the suffixes of the first group, the superessive and the terminative, aside from lacking an oblique stem, present another common feature: they both occur together with postpositions. This feature seems to separate the two suffixes in question even further from the suffixes of the second group. The suffixes of the second group present a very important feature in common with the postpositions, as has been pointed out by Hall and quoted above:¹⁹ they both take personal possessive endings, the suffixes with the help of oblique stems. It is therefore proposed to call this group of suffixes SUFFIXED POSTPOSITIONS.

Following a suggestion of Hall's,²⁰ the oblique-stem form, rather than the suffixed form, may be considered the basic form of a given suffixed postposition. When this basic form is suffixed to a given substantival stem, it falls into the contour of the stem and undergoes the vocalic alternations consistent with the vowel harmony pattern of the suffixed postposition. The vowel harmony pattern can be covered by a blanket statement such as has been made by Sebeok²¹ and by Hall in his *Hungarian Grammar*.²² However, other differences between the suffixed and the oblique-stem forms, such as lengthening or reduplication, would still have to be mentioned in separate statements.

Only the suffixes of the first group, together with the nominative zero suffix, would be CASE SUFFIXES in this treatment; and the Hungarian case system would have only 5 cases: nominative, accusative, superessive, terminative, and factive.

6. In conclusion, it can be said that this analysis results in three pure-relational categories in Hungarian: case suffixes, suffixed postpositions, and free postpositions. The former two classes can be grouped together as pure-relational suffixes, to preserve both Hall's (originally Sapir's) term and class. The close connection between the two classes of pure-relational suffixes and the class of postpositions was already hinted at by Hall²³ when he grouped pure-relational suffixes with postpositions because of certain characteristics (primarily their use as separate words when provided with personal possessive suffixes), which they share with the [latter]'. This contribution tends to clarify that connection by showing that instead of two partially related classes, there are actually three, one of which (the suffixed postpositions) forms a transition between the other two (case suffixes, postpositions).

¹⁸ Sebeok calls this suffix translativ. Regarding the initial /v/, cf. footnote 15.

¹⁹ See footnote 11.

²⁰ Personal communication.

²¹ See footnote 2.

²² Loc.cit. 19.

²³ Loc.cit. 32.

ARE CHINESE *hsi-p'i* AND *kuo-lo* IE LOAN WORDS?

OTTO MAENCHEN-HELFEN

MILLS COLLEGE

The IE origin of Chin. *mi*¹ 'honey', ancient and archaic Chin. *mǐt*, first pointed out by E. Polivanov,² is by now generally accepted.³ The question from which IE language the word was borrowed, however, is still unanswered. During the latter half of the first millennium B.C., the Chinese had contact not only with the Tokharians, but also with other IE peoples. In a letter to the present writer, dated August 29, 1938, E. Sapir wrote, 'I suspect strongly that at least two distinct IE languages appeared in Chinese Turkestan and West China at a quite early date and that these two languages belonged to distinct branches of IE.' If the two words discussed in this paper are IE loan words in Chinese, as I believe they are, they might be of some help in clarifying the problem of the IE languages spoken in the western Chinese borderlands.

Bronze belt hooks in the shape of a lying **S**⁴ made their first appearance in China in the 5th century B.C.,⁵ thus they appeared at a time when the art of the Eurasian steppes began to exert an ever-increasing influence on Chinese art.⁶ Most archeologists are, therefore, inclined to assume that the Chinese borrowed the belt hook from the nomadic tribes in the West and Northwest.⁷ The term under which it was known since the end of the 4th century B.C. is undoubtedly barbarian.⁸ The Chinese transcribed it as follows:

A. *hsi-p'i* < *siei-b'ji* < **siar-b'jær*;⁹ B. *shih-p'i* < *ši-b'ji* < **šiar-b'jær*;¹⁰ C. *hsü-p'i* < *sṣwo-p'ji* < **sṣjo-p'jær*;¹¹ D. *hsien-pi* < *sṣän-pi* < **sṣjan-pjæg*.¹²

In Huai-nan-tzū, Ch. chu-shu-hsün,¹³ the word appears under the transcrip-

¹ GS 405r (GS = B. Karlgren, *Grammata Serica*; Stockholm, 1940).

² Indo-evropejskoje *medhu—obšče-kitajskoje *mit, in *Zapiski vostočn. otdel. Imper. Russk. arkheolog. obščestva* 23.263-64 (1916).

³ A. Conrady, *Alte westöstliche Kulturwörter*, in *Berichte über d. Verhandlungen d. sächs. Akad. d. Wiss. zu Leipzig, Phil.-hist. Klasse* 77.7-9 (1925, 3. Heft); H. Jensen in *Festschr. f. Friedr. Hirt* 2.139-43 (Heidelberg, 1936).

⁴ Numerous reproductions in Solange Lemaître, *Les agrafes chinoises*, *Revue des arts asiatiques* 1937.138-49, 219-34; 1938.69-85.

⁵ Bronze figure found near Old Lo-yang, see L. Bachhofer, *The Art Bulletin* 23.325, fig. 1 (1941).

⁶ B. Karlgren, *Bulletin of the Museum of Far Eastern Antiquities* 9.97-112 (1937).

⁷ Bibliography in N. Egami and S. Mizuno, *Inner Mongolia and the Region of the Great Wall* 103-110 (Tokyo and Kyoto, 1935).

⁸ Wang Kuo-wei, Hu-fu k'ao, in *Kuan-t'ang chi-lin* 22.1a-4b; P. Pelliot, *T'oung-pao* 1921.180; 1927.124; 1928.139, 141-43; Shiratori Kurakichi, *Memoirs of the Research Dept. of the Toyo Bunko* No. 4.5 (Tokyo, 1929); Egami Namio, *Tōhō Gakuhō* No. 2.276-83 (Tokyo, 1931); P. Boodberg, *Harvard Journal of Asiatic Studies* 1.306 n. 79 (1936).

⁹ GS 596a, 566u.

¹⁰ GS 559, 566g.

¹¹ GS 90e, 566t.

¹² GS 209a, 874a.

¹³ 9, 24b, ed. Huai-nan hung-lieh chi-chieh.

tion *hsün-ch'ou*.¹⁴ King Wu-ling of Chao had a shell belt and a *hsün-ch'ou*. Wang Kuo-wei suggested an emendation of *hsün-ch'ou* into *hsün-yi*,¹⁵ the (originally barbarian) cap with two long pheasant feathers. But as in all enumerations of barbarian dress 'belt' is followed by 'belt hook', the Han commentator Kao Yu was undoubtedly right in taking *hsün-ch'ou* as meaning 'belt hook'. '*Hsün-ch'ou*,' he says, 'is to be read as *szü-p'i-t'ou*.¹⁶ The two characters stand for three syllables. They mean the hook fastened to the *kuo-lo* belt.¹⁷

Hsün < *siuën* < **sɿwen* corresponds to *szü* < *si* < **sɿar*. *Hsi*, *shih*, and *hsien* lead likewise to a final *-r* in the first syllable. As the transcription *hsü* shows, this *r* was, at least in the Chinese pronunciation, strongly reduced.¹⁸

The second syllable is represented by *ch'ou* < *d'ɿu* < **d'ɿôg* and *p'i-t'ou* < *b'ji-d'ɿu* < **b'jər-d'u*. In Kao Yu's time *d'ɿôg* must have already lost its archaic *-g* as proved by the alternative transcription *d'əu* < **d'u*. But it had still preserved the initial complex *bd-* as *b'd*; otherwise it could not interchange with *b'ji-d'ɿu*.¹⁹ In the transcriptions cited above, the second syllables have an archaic final: *-r* and *-g*. One could assume that *-r* and *-g* represent a foreign *-ɣ*. But the transcription *b'ji-d'ɿu* shows that the second syllable of the foreign word had a vocalic final.

The barbarian term for the belt hook can thus be reconstructed as **serbi* or **särbi*.²⁰ **D'u* or **d'io* in **serbid'u* (or *-d'o*) might be a suffix.

The commentators, with one exception, agree that *hsi-p'i* means 'belt hook', and the context in which the word occurs²¹ leaves, indeed, no doubt about it. Chang Yen²² alone offers a different explanation. He says, '*hsien-pi* is the name of the animal(s) of good omen of the *kuo-lo* belt which the eastern Hu like to wear.'²³ It is true that many Chinese and most of the barbarian belt hooks found in the Ordos region have a zoomorphic décor. Some of the animals may symbolize happiness or wealth. The inscriptions on the Chinese belt hooks invariably convey wishes for long life, promotion, etc.²⁴ But as the animals appear very frequently in pairs, fighting and biting each other, not all of them can be auspicious animals. Still Chang Yen's assertion is too explicit to be dismissed as due to a simple misunderstanding. **Serbi* might have meant both 'belt hook' and 'of good omen'.

Since the end of the T'ang period the Chinese were familiar with *hsi-p'i*

¹⁴ rad. 196 + GS 468p; rad. 196 + GS 1090g.

¹⁵ rad. 196 + GS 2r.

¹⁶ GS 557b; 566v, 118e.

¹⁷ See note 13.

¹⁸ For *siwo* transcribing *si* cf. Pelliot, T'oung-pao 1928.221-25.

¹⁹ For *BD* > *D* cf. Boodberg, Harvard Journal of Asiatic Studies 2.360 (1937). The cognate words **p'uk* (GS 1211g) and **d'ôg* (GS 1090t) 'block of wood', and **p'uk* (GS 1210e, 1211j) and **tôg* (GS 1090r) 'to beat' also indicate an archaic *BD*.

²⁰ Pelliot loc.cit. 142 n. 6; B. Karlgren, Bull. of the Mus. of Far Eastern Antiquities 5.29-30 (1933).

²¹ Passages quoted by Wang Kuo-wei and Pelliot, see note 8.

²² Lived in the 3d century A.D.

²³ Pelliot loc.cit. 143

²⁴ Jung Kêng, Han chin wên lu 6.1a-10a.

lacquer.²⁵ They called by this term the technique of carving alternate layers of lacquer of various colors in manifold curvilinear patterns. The word betrays its foreign origin by the instability of the graph.²⁶ The technique reached China from the West.²⁷

The earliest specimens of *hsi-p'i* lacquer known are the leather armor scales which Sir Aurel Stein found in the Tibetan fort at Miran in the southern Tarim Basin.²⁸ Among the patterns comma-shaped hooks and inverted **S** figures prevail. Huang Ta-ch'êng,²⁹ author of the *Hsiu-shih-lu*, and Yang Ming, its commentator,³⁰ enumerate as typical *hsi-p'i* patterns sword-rings, repeated circles, cloud-hooks, overlapping circles, and other curvilinear designs.³¹ Carved lacquer of various colors, whether applied to the wooden or leather core in alternate layers or not, is known as *fu sê tiao ch'i* 'repeated-colors-carved-lacquer'. It is only lacquer carved in curves which is called *hsi-p'i*. The *hsi-p'i* lacquer got its name from the pattern.

It is tempting to connect *hsi-p'i*, the **S**-shaped belt hook, with *hsi-p'i*, the hooks and **S**'s of the lacquer design. But as long as the latter word cannot be traced farther back in time, it seems wiser to refrain from premature speculation.

The *hsi-p'i* hook was fastened to the *kuo-lo* < *kwâk-lâk* < *kwâk-glâk* (GS 774a, 766k) or *k'uo-lo* < *k'wâk-lâk* < *k'wâk-glâk* (GS 774g, 766q¹) belt. The word was undoubtedly borrowed from the same language in which *hsi-p'i* meant 'belt hook' and, perhaps, 'of good omen'.

Pelliot and Shiratori thought that *hsi-p'i* was a Hsiung-nu word.³² Whatever language the Hsiung-nu spoke, be it Mongol or Tungus or Turkish,³³ it was certainly not an IE language. The historical data, however, point decidedly to IE peoples as those from which the Chinese borrowed belt and belt hook, and the words for them.

The date of the Ta-chao, the earliest source in which *hsien-pi* = *hsi-p'i* occurs, precludes a Hsiung-nu origin of the word. The poet praises the beauties for 'their small waists and necks as slender as *hsien-pi*'.³⁴ Some scholars assumed that the poet might have alluded to the Hsien-pi tribe.³⁵ But the Ta-chao was

²⁵ Mentioned for the first time in Chao Lin's *Yin-hua-lu* 2.11a-b, ed. Ko-chih-ching-yüan.

²⁶ *hsi-p'i* (GS 596a, 566u); (GS 596a, 566g); (GS 594a, 25); (GS 596a, 25). Cf. O. Maenchen-Helfen, *Ostasiatische Zeitschrift* N.F. 13.217-18 (1937).

²⁷ Cf. e.g. *Hsi-shang-fu-t'an* by Yü Yen (fl. A.D. 1250), quoted Ko-chih-ching-yüan 36. 28a; *T'ing-yü-chi-t'an* by Tu Mu (1458-1525), quoted Tz'ü-yüan s.v. *hsi-p'i* (the first *hsi-p'i* in note 26); Ueda Kyôsuke, *Shina kottô to bijutsu kôgei zusetsu* 80-1 (Tokyo, 1933).

²⁸ Serindia 464, pl. L (Oxford, 1921).

²⁹ Lived in the period Lung-ch'ing (A.D. 1567-72).

³⁰ The preface is dated A.D. 1625.

³¹ *Hsiu-shih-lu* 2.7a, 10b-11a, ed. T'o-pa-ch'an ts'ung-k'ê.

³² Pelliot, *T'oung-pao* 1928.141; Shiratori loc.cit.

³³ On the traditional identification of the Hsiung-nu with the Huns cf. O. Maenchen-Helfen, *Hsiung-nu and Huns*, in the forthcoming issue of *Byzantion*.

³⁴ *Ch'u-tz'ü* 10, 7b, ed. Szü-pu-ts'ung-kan.

³⁵ *Ch'ü Fu* (flourished A.D. 1735) in *Ch'u-tz'ü hsin-chu* 8, 5a; E. Erkes in *Asia Major*, Hirth Anniversary Volume 78.

written shortly after 300 B.C. Its author, living in Ch'u, the southernmost state of China, could have no knowledge that more than three hundred years later³⁶ marauding Hsien-pi would appear in Manchuria. A. Waley³⁷ and H. Giles³⁸ recognized in *hsien-pi* the belt hook. It has been so interpreted by Wang Yi and, following him, practically all Chinese critics. 'La comparaison,' says Pelliot, 'peut très bien porter sur la forme allongée et gracile de ces agrafes.'³⁹ Many of the gracefully curved hooks remind one vividly of the Han clay figures of dancing girls, with their sideward thrust of the hips.

As it was not before 230 B.C. that the Hsiung-nu became known to the Chinese, at which time the horde had its pastures in Inner Mongolia,⁴⁰ the people of Ch'u could not well have borrowed the belt hook and the word for it from them.

On the other hand, tradition unanimously ascribes the introduction of barbarian dress and equestrian outfit to king Wu-ling of Chao (325-299 B.C.).⁴¹ In taking over the technique of warfare and the dress of his enemies, he merely sanctioned what the frontier troops had done long before in order to meet the highly mobile Hu tribes on equal terms. Wu-ling defeated them in 306 B.C. and again, decisively, in 300 B.C. The Northern Ordos, along the Huang-ho, was annexed to Chao.⁴² Now Professor Haloun has shown that in the middle of the 4th century B.C. the Ordos was the home not of Hsien-pi or Hsiung-nu, but of the Yüeh-chih, the *Tóχαροι* of the classical sources.⁴³

This is not the place to discuss the intricate problem of the ethnic composition of the Yüeh-chih. Whether their language was Proto-Tokharian, which developed into the dialects of Kuchā and Qarašahr, or whether they were already then under Iranian lords, as the present writer believes, the history of *hsi-p'i* and *kuo-lo* leads in either case into an IE milieu.

Egami attempted to derive *kwáklák* from Turkish *kušak* 'belt'.⁴⁴ He assumed that *kušak* goes back to **kuršak*. But there is no proof for this, and even the hypothetical **kuršak* could most certainly not have been transcribed by *kwáklák*. Equally unsatisfactory is Shiratori's proposal to connect **serbi*, attested in the 4th century B.C., with modern Manchu *sabi* 'happy omen'.⁴⁵ Boodberg, without stating his opinion as to the origin of the word, compared **serbi* with Mongolian *serbe*.⁴⁶ Kovalevskij⁴⁷ lists *serbe* 'small hook, notch'; *serbe-ge* 'notch, small hook, gill, crest, agraffe'. The word seems to be isolated in Mongolian.

For the historical reasons adduced above, I am inclined to suggest IE etymologies for both **serbi* and *kwáklák*.

³⁶ In A.D. 49.

³⁷ More translations from the Chinese 17 (New York, 1919).

³⁸ The New China Review 2.332 (1920).

³⁹ T'oung-pao 1921.180.

⁴⁰ G. Haloun, ZDMG 91.306 n.1 (1937).

⁴¹ Pelliot, T'oung-pao 1928.138-47.

⁴² Shih-chi ch.43; J. J. M. de Groot, Die Hunnen der vorchristlichen Zeit 34-36 (Berlin, 1921).

⁴³ Haloun loc.cit. 305-13.

⁴⁴ Tōhō Gakuhō No. 2.281 (Tokyo, 1931).

⁴⁵ Loc.cit. p. 5; cf. also I. Zakharov, Mančžursko-Russkij Slovar 591.

⁴⁶ Loc.cit.

⁴⁷ Dictionnaire Mongol-Russe-Français 2.1373.

**Serbi* 'belt hook' can be connected with IE words denoting 'hook, scythe': OCS *srъpъ*, Lett. *sirpe*, Gk. *ἄρπη*, Lat. *sarpio* and *sarpo*, OIrish *serr*. H. Güntert tried to prove that a number of words for 'good luck, of good omen' meant originally 'angle, Krummgebilde'.⁴⁸ I do not feel competent to judge the validity of Güntert's etymologies. If he is right, **serbi* could mean 'belt hook' AND 'of good omen'.

The connection of *kwāklāk* 'belt' with IE *k^uek^ulo-*, Gk. *κύκλος* 'circle', Skt. *cakrās*, Avest. *čaxrō*, Tokhar. A *kukāl* 'wheel' presents no semantic difficulties.

⁴⁸ Wörter und Sachen 11.135-36 (1928).

MISCELLANEA

DATIVE PLURAL OF THE *o*- AND THE *ā*-STEMS IN HOMER¹

GEORGE MELVILLE BOLLING, OHIO STATE UNIVERSITY

Typical examples of the forms found in our editions are 'Αχαιοῖσι, 'Αχαιοῖς, and θεῆσι, θεῆς. We need not linger over the fact (cf. Wackernagel 53 n.) that forms ending in *-ais* are found: without variant at M 284, ε 119, in a noteworthy number of MSS at A 238, χ 471, and sporadically as a weakly attested variant elsewhere. That is of interest for the history of the transmission of the text, but not in any other connection. In Homer we have to do only with three dialects, Aeolic, Ionic, and Attic; and as these forms are neither Aeolic nor Ionic they must be Attic. That the ending *-ais* is found in the earliest records of other dialects is irrelevant. It can lend no support to the suggestion (Hirt 335) that these Homeric forms may be old. On the contrary we can date the Attic intruders: forms in *-ais* are found in Attic inscriptions after 420 B.C. and cannot have got into the Homeric tradition much earlier. As a first step we must replace the Ionic forms they have ousted: ἀκτῆς, θεῆς, παλάμης, πάσης.

The outlines of the prehistory of the type 'Αχαιοῖσι are in the main clear. Its source is the IE locative ending in *-oisu* (Skt. *devesu*). The difference in the final vowel is met either by ascribing doublet forms *-su*, *-si* to IE, or by suggesting analogic influence of the *-i* of the locative singular. The intervocalic *-σ-* is also an analogic creation after γυναιξί, ποσσί, βέλεσσι, etc.

The type θεῆσι is of similar origin but with an additional complication. The IE ending was *-āsu* (Skt. *senāsu*); and to it correspond Ionic Δεσπότησιν, early Attic δραχμήσι. A corresponding ending *-āsi* has vanished in Lesbian before the beginning of our records. Under the influence of *-οισι* a diphthong was produced analogically: Lesbian ἀμφοτέραισι, Ionic Νύμφησιν (predominant type), and early Attic (sometimes) -ησι.

The type 'Αχαιοῖς offers greater difficulty. Phonetically it may continue the IE instrumental in *-ōis* (Skt. *devāis*), and for the dialects that have no other ending this may be the whole story. But, given the co-existence of *-οισι* and *-οις*, the possibility of their being merely sentence-doublets claims consideration.

¹ This article is an outgrowth of work on an edition of the Iliad. I gratefully acknowledge in this connection a Minor Grant made by the American Council of Learned Societies for clerical and research assistance.

The examples of this case were collected by Gerland, KZ 9.36 ff. (1860) and discussed by Reichelt, De dativis in OIS et HIE (AIS) exeuntibus, Breslau, 1893.

Works cited in abbreviated form are:

Fr. Bechtel, linguistic contributions to Carl Robert, Studien zur Ilias, Berlin, 1901
Bechtel, Die Vocalcontraction bei Homer, Halle (a.S.), 1908
Bechtel, Die griechischen Dialekte, Berlin, 1921-4
G. M. Bolling, The Athetized Lines of the Iliad, Baltimore, 1944
H. Hirt, Handbuch der griechischen Laut- und Formenlehre², Heidelberg, 1912
D. B. Monro, A Grammar of the Homeric Dialect, Oxford, 1891
J. Wackernagel, Sprachliche Untersuchungen zu Homer, Göttingen, 1916 (= Glotta 7.161-319)

No objection can lie against *-οισ'* as an antevocalic form of *-οισι*, since in the third declension the same ending is so treated: *Κιλίκεσσ', Φαιήκεσσ', κορύθεσσ', κανόνεσσ', δώμασ', στήθεσσ', ἔπεσσ', ξιφέεσσ', καταπρηνέσσ', χέρσ', δάκρυσ', πολέεσσ', πολέεσσ', πρυλέεσσ', Τρώεσσ', νήεσσ', νέεσσ'*. It is perfectly normal for the original (phonetic) distribution of sentence-doublings to be disturbed afterwards by analogy. The purpose of this study is to see whether that is what has happened in Homer.

Our habits of printing—based on Byzantine script—make the discussion, to say the least, unnecessarily verbose. Meter sorts the forms into three classes: (1) *'Αχαιοῖσι, θεῆσι*; (2) *'Αχαιῶις, θεῆς*; and (3) antevocalic forms that may belong to either one of the first two classes. It makes the status clearer to give to the last a distinctive form *'Αχαιοῖσ', θεῆσ'*; and no confusion need result since it has already been stated that such writing implies at present no more than that the forms may have arisen by elision of *'Αχαιοῖσι, θεῆσι*.

If *'Αχαιῶις* is an old instrumental waging a losing battle against the competing locative we should expect examples of it in the earliest strata of the *Iliad*, and a tapering off of their occurrence in the later strata and in the *Odyssey*. This is not what is found.

Examples of *τοῖς* and its derivatives are: B 516, 524, 680, 733, 747; Δ 153; H 170; K 196, 241; M [372]; P 384; γ 113, 390, 490; δ 630; μ 425; ξ 459; ο 188, 304, 439; σ 51, 60; φ 130, 274; χ 131, 247, 261; ω 490; *τοῖσδε* η 23; ι 286; δ 93; ξ 443; *τοῖσδεσσι* K 462; β 47, 165; ν 258; *τοῖσδεσι* κ 268; φ 93. These may be held out for further discussion later.

At the end of the verse. In the *Iliad*: *ἀρίστοις* Γ 274; *αὐτοῖς* X 513; *'Αχαιῶις* E 86, 465; Θ 487, N 426 (v.l. *'Αχαιῶν*), P 396, X 117, Ψ 649; *δώροις* I 602 (v.l. *δώρων*); *ἐταίροις* Γ 259; *φύλοις* B 363; also *ἐρετμοῖς* A 435. In the *Odyssey*: *ἀέθλοισ* θ 131, ρ 174 (v.l. *ἀέθλων*); *ἄλλοις* π 264; *αὐτοῖς* ν 213; *βωμοῖς* γ 273; *ἐργοῖς* ξ [228]; *ἐρετμοῖς* δ 580, ι 104, 180, 472, 564, μ [147], 180, ν 22, ο 497; *ῥμοῖς* ζ 235, θ 19, ξ 528, ο 61, ψ 162.

Within the verse. In the *Iliad*: *ἄλλοις* Ω [25]; *δόμοις* A 132 (v.l. *Zen.*); *ἐπισσώτρους* Τ 394; *ἐνπλοκάμοις* X 442; *ἡμιόνοις* Ω 442; *θεοῖς* E 606, Τ 292; *μεγάρους* B 137, Ω 664; *μύθοις* (v.l.) Ψ 478; *ξείνοις* Δ [779]; *οῖς* Γ 109; *πλείοις* Θ 162, M 311; *πορφυρέοις* Ω 796; *προμάχοις* Δ 253; *χρυσέοις* Δ 3. In the *Odyssey*: *ἀγανοῖς* (v.l.) γ 280, ε 124, λ 199, ο 411; *αὐτοῖς* τ 140; *δόμοις* ν 424; *ἐμοῖς* τ 490; *θεοῖς* δ 755; *μεγάρους* ζ 62, η 190, κ 5, ξ 326, ο 77, 94, 231, π 33, ρ 391, τ 295, χ 218, 370, 417; *μύθοις* δ 239; *ξείνοις* ν 374; *οῖς* ω 312; *στιβαροῖς* ξ 528, ο 61; *τρητοῖς* (v.l.) α 440, κ 12; *χρυσέοις* γ 472.

The argument is not circular. It is true that *-οις* has been recognized as a mark of lateness, and that use has been made of this as a criterion; but the use is always merely corroboration of conclusions that can be reached—and generally easily reached—on other grounds.

That the ending *-οις* does not appear in the oldest strata is evident on the surface. The one example in A is *ἐρετμοῖς* (435) in the Restoration of Chryseis. There is no example in Π; nor in Δ, not even in its later additions. For *ἐν Ἀντιμάχου πατρός* must read in 132 on the authority of Zenodotus instead of *ἐν Ἀντιμάχου δόμοις*, and *ξείνοις* of line 779 falls within an interpolation.

For Γ more care is needed. We must distinguish: the Duel, the Teichoskopia,

the Bringing of Priam to the Battlefield. Only in the last of these² does *-ous* occur: *ἐταίρους* (so Zen. Ar. Ω) in 259, *ἀρίστους* in 274, not to mention *οἷς* [109] within an interpolation.

The question shifts and becomes: How soon does *-ous* appear? A claim for the Aristeia of Diomedes can be entered because of *Ἀχαιοῖς* (E 86, 465) and *θεοῖς* (606). There is no need to contest it, since the nearly contemporary Slaying of Hector³ has *ἐπισσώτρους* (Γ 394) and *Ἀχαιοῖς* (χ 117). The other examples in the Iliad are obviously still later and need no comment.

The Odyssey does not show an increase of the use of *-ous* in nouns and adjectives such as might be expected. I associate this with the fact that in such words *-ous* does not appear in the Ionic spoken on Asia Minor—cf. Bechtel, GD 3.141–3. The ending is to be described as Late Epic and Attic, and Anacreon will have got it from one or the other of these.

Exceptional is the use of *τοῖς* to which I now return. Why it should be so, I cannot say. It is used for the article, and only for the article in Ionic and in Lesbian (Bechtel, GD 1.65–6). There is nothing to foreshadow this in Homer, where all examples are clearly pronominal. Those in the Iliad⁴ are late, and all are of the phrase *τοῖς δέ* at the head of a line. The Odyssey uses the form more frequently, and does not (cf. γ 113, 490, μ 425, ο 188) so restrict it. It adds the derivative *τοῖσδε* which it epicizes as *τοῖσδεσσι* (so also K 462), or as *τοῖσδεσι*. The increased usage of the Odyssey agrees with the continued presence of *τοῖς* in Ionic; but beyond this nothing is clear.

The type *Ἀχαιοῖς* results then from a disturbance of the sandhi conditions by which the variation of *Ἀχαιοῖσι* : *Ἀχαιοῖσ'* was once controlled. The same must hold good for *θεῖς*, and all the more so because there was, in the *ā*-stems, no IE instrumental from which it could be derived. There is no reason to believe that the change took place earlier here than in the *o*-stems. The examples are:

At the end of the verse. In the Iliad: *ἀκτῆς* M 284; *μέσσης* Ω 84. In the Odyssey: *εἰσς* δ 578 (text?); *Θήβης* δ 126; *πάσης* χ 471.

Within the verse. In the Iliad: *βήσσης* II 766; *ῆς* Ω 201; *κοίλης* A 89; *κονίης* E 75 (v.l. *-ιη*); *οἷης* E 641; *παλάμης* A 238; *σῆς* A 179; *χρυσείης* M 297, Ξ 180. In the Odyssey: *ἀφραδίης* χ 288; *ἐνξέστης* φ 137, 164; *θαλίης* λ 603; *θοῆς* ι 86, κ 57; *πέτρης* η 279; *πολλῆς* ρ 221; *προχοῆς* λ 242, υ 65.

The distribution of the examples in the Iliad (4 out of 11 in the earliest stratum) is in glaring contraction to that of *-ous*. To believe that this is just an accident is to be too credulous. The solution of the difficulty was found long ago, but may be repeated briefly.

In our MSS is read:

A 88 οὐ τις ἐμεῦ ζῶντος καὶ ἐπὶ χθονὶ δερκομένοιο

But here the indirect tradition reaches much farther back. In π 439—and the Odyssey is part of the indirect tradition of the Iliad—the line is presented as:

² For other peculiarities of its dialect, cf. Bechtel, VC 117.

³ Cf. AJP 42.277 (1921) where it is shown that Robert and Wilamowitz, tho working with very different criteria, come very close to agreement about this portion of the Iliad. The judgment there expressed about the difference between them is modified in Ath. Lines 176.

⁴ The reading in B 516, 680, 733 is far from certain.

ζώντοός γ' ἐμέθεν καὶ ἐπὶ χθονὶ δερκομένοιο.

This is clearly superior and forces οὗ τις into the next line from which κοίλῃς must then disappear:

οὗ τις σοὶ παρὰ νηυσὶ βαρείας χεῖρας ἐποίσει.

The tradition is at fault also in A 238. It varies between παλάμης and Attic παλάμαις, late and needless corrections of παλάμη used as a distributive singular. For this construction cf. Monro 159, adding the good parallel given by Bechtel: ἀνερρίπτουν ἄλα πηδῶ (ν 78). In II 766, as Nauck saw, an earlier bit of modernisation took place when βήσσησι βαθύν was changed to late Epic βήσσης βαθέην in which both words⁵ sin against the dialect of the immediate context. Monro 339 saw that A 179

οἴκαδ' ἰὼν σὺν νηυσὶ τε σῆς καὶ σοῖς' ἐτάροισι

was an adaptation of 183

σὺν νηὶ τ' ἐμῇ καὶ ἐμοῖς' ἐταροῖσιν

but it was left for Robert 214 to point out that it is a later addition.⁶

The correction of these passages removes the apparent discord between the distribution of the types 'Αχαιοῖς and θεῆς. Both result from a shifting of sandhi forms; and we may now claim that printing 'Αχαιοῖς', θεῆς' is not only a convenient aid in our description of the text, but also true historically.

OLD JUDAEO-SPANISH *yegüeria* 'MESS, DISH'

YAKOV MALKIEL, UNIVERSITY OF CALIFORNIA

The derivation of Portuguese *iguaria* from Late Latin *iecuāria*, proposed LANG. 20.108-30, receives support from the discovery, in an ancient Judaeo-Spanish Bible translation (Escorial MS I.j.4 of the early 14th century, fol. 22a, line 35), of the two variant forms *yguaria* and *yegueria*, i.e. *yegüeria*. The text is as yet unpublished; I owe knowledge of the passage under study to the courtesy of Professor O. H. Hauptmann, who has specialized in this field. The sentence (Genesis 43:34) reads as follows: *Et fizo leuar yguarias delante el a ellos, e crescio la yegueria de Benjamin mas que la yégueria de todos al çinco tanto, et beuieron vino e çidra con el* 'And he sent messes unto them from before him; but Benjamin's mess was five times so much as any of theirs, and they drank wine and cider with him.'

We can hardly determine why a Portuguese, or at best a Leonese, and a Castilian form were used side by side in the same passage (notice the characteristic difference of the suffixes). Judging by Hauptmann's essay in *Hisp. Rev.* 10.34-46, the word material of this text is Castilian interspersed with an occasional

⁵ On another example of the elimination of fem. -ων, cf. Wackernagel 62-3.

⁶ Line 177 is an interpolation, and 178 (because of *καρτερός*) is also an addition. Agamemnon's objection to Achilles' behavior is that he wishes to lord it over all (288), and here with the forcefully simple *Μυρμηδόνεσσι ἀνασσε* he orders him to stop it.

Western form (*selmana* 'week', *luytoso* 'mournful'); R. Levy has subsequently drawn attention to the survival, in this translation, of the ancient Judaeo-Romance lexical stock, see *Hisp. Rev.* 11.57-63. We need more accurate data on the background of the translator and the scribe, also of the communities to which each of them belonged, before we can attempt to account for this early mixture of Hispanic dialect forms.

The significance of the finding is that it provides the intermediary link between the now firmly established Latin etymon and the earliest hitherto known Hispanic product. Surely, the development went along the following line: *iecuāria* > *iecuaria* > *yegüeria*, *yeguaría* > *iguaria*. Yet if the correctness of the derivation cannot easily be challenged, some details in the argument here used to prove it are admittedly in need of revision in the light of the newly discovered variant.¹

Not only did the original area of *iecuaria* comprise Western Spain in addition to Portugal, but the shift *yegüeria*, *yeguaría* > *iguaria* would appear to be due to the (tendential) simplification of unstressed ascending diphthongs in Old Spanish; see the thorough discussion of this phenomenon by M. A. Zeitlin in *Modern Language Forum* 24.84-90. The same principle would apply to the development of *germānu*; for references to archaic *iermano*, *irmano*, *girmano*, principally in documents traceable to Western towns like Palencia and Sahagun, see Oelschläger, *Medieval Spanish Word-List* 106; *irmano* occurs likewise in the Leonese *fueros* edited by Castro and Onís.

As for the disappearance of *yegüeria* from Spanish, believers in Gilliéron's homonym theory will not fail to point out that there existed yet another, presumably more recent *yegüeria* 'drove of mares', derived from *equa*, which may have served as an obstacle to the survival of the older word. In Portuguese the two corresponding words *iguaria* and *eguada* did not interfere with each other, nor would the presence of *eguaría* (which is apparently of limited, if any, use) substantially alter the picture. The Spanish Academy Dictionary lists *iguaria* as an out-and-out Lusitanism; it must indeed be a very recent borrowing, since the *Diccionario de Autoridades* of the early 18th century fails to document this word.

SPANISH *parece que*

EPHRAIM CROSS, COLLEGE OF THE CITY OF NEW YORK

This study considers an established use of *parecer* 'to seem' not found in the grammars. The Spanish Academy's grammar¹ cites only the construction *parece que viene Juan* 'it seems that John is coming'. Bello² treats *parece alejarse la tempestad* 'the storm seems to be moving off', *parecieron por un momento amansarse las olas* 'the waves seemed to grow gentle', and *los edificios parecían desplomarse* 'the buildings seemed to be collapsing'. Hanssen, in his *Spanische*

¹ The discovery of *yegüeria*, with its characteristic diphthong in the pretonic syllable, also makes untenable the conjecture proposed in *LANG.* 21.98-9.

² Gramática de la lengua española §284 b (Madrid-Barcelona, 1931).

³ A. Bello, Gramática de la lengua castellana²³ §1099 and Notas §132 (Paris, 1928).

Grammatik,³ comments: 'Der infinitiv kann ein subjekt im nominativ zu sich nehmen: *parece alejarse la tempestad*', but he cites no other pertinent construction. Ramsey⁴ has not treated the uses of *parecer*, nor has Keniston⁵ in his Spanish Syntax List. Salvá,⁶ in a grammar published about a century ago, cites: *Los hombres parecen olvidarse de que han de morir* 'men seem to forget that they have to die' and (the impersonal use) *parece que se olvidan los hombres de que han de morir* 'it seems that men forget', etc.

We are now confronted with the sentence: *Debió de escribirse hacia 1497, y el lugar de la acción parece que es Salamanca, aunque no fallen quienes opinen que se refiere a Toledo* 'it must have been written toward 1497, and the place of the action it seems that it is Salamanca [seems to be].' This is a sober sentence found in a dignified history of Spanish literature.⁷ Interestingly enough, on the third line of the same page of the history cited appears the familiar construction: *Parece que la edición más antigua conocida hasta hoy de esta obra extraordinaria es la de Burgos* 'it seems that the oldest edition of this extraordinary work is the Burgos'. In the well-known comedy, *El sí de las niñas*,⁸ we read: *Un oficial y un criado suyo, que parece que se van a Zaragoza* 'an officer and a servant of his who it seems that they are going away to Saragossa [seem to be going away]'. In another type of literature, the novel,⁹ we find: *La hierba parecía que se apartaba para darle paso* 'the grass it seemed that it was drawing back to open up a path for him [seemed to be drawing back]'.

In the examples just offered, which fall into a mold: opening subject + *parece que* 'it seems that' + verb in agreement with the opening subject, we have a mode of expression that has undoubtedly become a natural Spanish construction. Of course it may be analyzed as an instance of anacoluthon, of croisement, or of contamination. French *je me souviens* 'I remember' may have arisen out of a contamination, but present-day French linguistic consciousness is aware of no contamination in this expression. Even if this description might reflect the origin of the Spanish construction would it truly fit the present usage? As the construction unfolds itself in normal utterance there is no want of 'grammatical sequence or consistency' in the sentence.

It is noteworthy that in this construction the verb form *parecer* always appears in the third person singular but shows variation for tense depending upon the tense of the verb that completes the predication. In this we have a distinction from *los edificios parecían desplomarse* 'the buildings seemed to be collapsing'.

As for this last, Salvá states¹⁰ that some maintain that the construction should be *los hombres parece olvidarse de que han de morir* literally, 'men (it) seems to

³ F. Hanssen, *Spanische Grammatik* §38.9 (Halle, 1910; Sp. ed., 1913).

⁴ M. M. Ramsey, *A textbook of Modern Spanish* (New York, 1894); little changed in subsequent printings, 1934, 1940.

⁵ H. Keniston, *Spanish Syntax List* (New York, 1937).

⁶ V. Salvá, *Gramática de la lengua castellana* 208 (Paris, 1846).

⁷ J. Hurtado y J. de la Serna and A. González Palencia, *Historia de la literatura española* 237 (Madrid), 1932).

⁸ L. F. de Moratín, *Obras dramáticas y líricas* 2 Act II Sc. 15 (Paris, 1826).

⁹ B. Pérez Galdós, *Marianela* ch. xvii 197 (Madrid, 1919).

¹⁰ Op.cit. 447.

forget that they have to die'. He himself contends that there should be agreement of the verb in this case and he is hard put to it to decide what propriety requires.

Perhaps it was in avoidance of the mixed possibility, *los hombres parece olvidarse* [singular verb], that the arrangement *los hombres parece que se olvidan* was adopted.

Starting with a theoretical original *el lugar parece ser Salamanca* 'the place seems to be S.' and *parece que el lugar es Salamanca* 'it seems that the place is S.', the turn *el lugar parece que es Salamanca* 'the place it seems that it is S' may be regarded as legitimately having an 'exposed' subject. Ultimately, it is all a matter of usage—that means, of course, group usage—provided the usage is no longer felt as 'personal', 'abnormal', or 'occasional'. What makes its appearance as anacoluthon in the light of historic syntax loses its original attribute in synchronic syntax.

Parece que in effect becomes equivalent to an adverb meaning 'apparently', 'seemingly'.

NOTES ON MARSHALLESE CONSONANT PHONEMES

DENZEL CARR, U. S. NAVAL RESERVE

ORTHOGRAPHY. The orthography of Marshallese was devised by American Protestant missionaries in the middle of the last century. The Bible has been translated into Marshallese and written in what we refer to as the Bible spelling. If the Marshallese were good spellers, the Bible spelling would probably be as hallowed in practice as in theory. As it is, many valuable clues to phonemic facts in Marshallese have been derived from variant spellings. The linguist loveth a cheerful misspeller!

The Bible spelling uses the vowels *a, e, i, o, u* in their nearest Continental values, and adds *ā* for [æ], *ō* for any unrounded central vowel higher than *a*, and *ū* for any rounded central vowel. The consonants are spelled as *b, dr, j, k, l, m, n, ñ* [ŋ], *p, r, t, w, y*, with the addition of *d, f, g, h, s, š* [ʃ], *v, x, z* for use in foreign names.

The German Catholic missionaries introduced several changes into the Bible system. They substituted *ä, ö, ü* for *ā, ō, ū*, added macrons to long vowels (over the umlauts and under the tilde), distinguished open *o* [ɔ] from close *o* [o] by writing the former *ô*, and distinguished a clear (deutlich) *l* and *r* from a peculiar (eigenartig) *l* and *r* by underlining the 'peculiar' varieties.¹

¹ P. August Erdland, *Wörterbuch und Grammatik der Marshall-Sprache nebst ethnographischen Erläuterungen und kurzen Sprachübungen* 196-7 (Berlin, 1906). 'l und r haben neben der deutlichen Aussprache eine eigenartige. Bei l ist es, als ob ein l anklingt, dem ein nachdrücklicheres in Verbindung mit dem folgenden Vokale folgt. Diakritisches Zeichen ḷ. [Examples omitted.] Bei der Aussprache des der Marshall-Sprache eigenartigen r (ṛ), steht die Zungenspitze beinahe gegen das Zahnfleisch. Die dann durch die Enge getriebene Luft bringt den r-Laut hervor. [Examples omitted.] Es wäre auch wohl richtig; [sic] dieses ṛ wie das ḷ zu erklären. Jedoch scheint es falsch zu sein, diesen Konsonanten als ein r, dem ein d vorklingt, zu bezeichnen, da ein Übergang von d auf r nicht im geringsten vorhanden ist und dieses dr in manchen Wörtern zweimal nacheinander gesetzt werden müsste, z.B. *adrdrin*, da *ar* = Fingerbreite, *ri* = Knochen. Niemand schreibt so.'

The B. (Bible) *dr* is sometimes represented by G. (German) *r*, sometimes by *ṛ*. The German spelling of *r* and *ṛ* has been found to accord in general with the phonemic facts.

Cuius regio, eius orthographia (with a frequent substitution of *religio* for *regio*) still holds in the Pacific. Malay has a British and a Dutch spelling as well as an Arabic. Marshallese has American Protestant and German Catholic spellings. Under Japanese rule a system of writing Marshallese in the Japanese syllabary was used by some.² The use of an open-syllable syllabary such as the Japanese for writing a language abounding in closed syllables could hardly have been more ill-advised. Fortunately, this use was so restricted that it could be dropped as soon as Japanese control was broken. It never replaced the other two systems among the Marshallese.

With the advent of American military government, orders and regulations had to be conveyed to the people in writing, which to an American means by typewriter and mimeograph. The Bible spelling was used with all tildes replaced by overlining (macrons). A Marshallese-English and English-Marshallese dictionary with phonetic respelling of each word has now been prepared with the substitution of double quotation marks over *a o u* for B. *ā ō ū* and G. *ä ö ü*, and *ñ* for B. and G. *ñ*. These diacritics are not intended to replace the tilde in handwritten matter, but only to insure ease of reproduction on a standard American typewriter.

PHONEMIC ANALYSIS. (a) EARLIER TABULARIZATION. On first contact with written Marshallese, I wondered whether the consonants should not be arranged to show that *dr* functioned as a stop and *r* as the corresponding open sound, as in this correlation: (Bible spelling) *b m; dr r; t n; j (?) ; k ñ*. That left out *l* (and, if Erdland were right, two *ls*) and also led me to suspect there might be a palatalized *n* [ñ] to serve as the open-consonant correlative of *j*.

(b) PALATALIZATION. Brief contact with Marshallese, however, revealed that *dr* was a palatalized *r* [ɾ] and that Erdland's 'normal' (i.e. German) *l* was a palatalized variety [l'] while his 'peculiar' *l* (underlined in his dictionary) was a dark, English type. Lt. Commander S. H. Elbert, who had been to the Marshalls, noticed that *b* and *m* had variants, which proved to be palatalized. This led to a hypothetical rearrangement of the phonemes, as seen in Table 1.

TABLE 1

	STOP	NASAL	STOP	NASAL	STOP	NASAL	LIQUIDS	
Non-palatalized:	p	m	t	n	k	ŋ	l	r
Palatalized:	p'	m'	t'	(ñ?)	k'	ŋ'	l'	ɾ

Examples of the labials are:

p: bakke [pakke] 'yaws'; *bao* [pao] 'bird, chicken'; *bokbok* [pok(o)pok] 'sandy'

p': bakke [p'akke] 'big gun, cannon'; *bao* [p'ao] 'appear'; *bokbok* [p'ok(o)p'ok] 'cough'

² Sizuo Matuoka, *Māsyaru-go no kenkyū* [A study of the Marshallese language]; Tōkyō, 1929.

m: *manit* [manīt] 'custom'; *man* [man] 'good'; *mule* [mule] 'dove, pigeon'
m̄: *mao* [m̄ao] 'bruised'; *me* [mé] 'fort'; *kemour* [kæm̄our] 'to cure, heal'

The so-called dentals require some explanation, for *t'* (Bible *j*) has now shifted position to [č] initially and [ǰ] medially (in accordance with the voicing pattern of stops), but in final position the older [t'] is a very frequent variant of the more normal [č]. For this reason loanwords from English often represent *-t* by *-j*: *kimlij* [kīm(i)lič] 'gimlet', *boj* [poč] 'boat'.—No case of [ɺ] has been fully authenticated.

The palatalized velars require further study. Only a few cases of [ŋ'] have been positively identified: *no* [ŋ'o] 'to pound' contrasts with *no* [no] 'wave'; *ñāt* [ŋ'æt] 'when'.—[k'] occurs in *kābij* [k'æbič] 'cabbage' and before *i, e*, but no words identical but for [k] and [k'] have been found yet.

Contrasts for [l] and [l'], [r] and [r'] are very numerous.

l: *lañ* [laŋ] 'storm'; *le* [le] 'he'; *lok* [lɔk] 'away from'

l': *lañ* [l'aŋ] 'sky, weather'; *le* [l'e] 'she'; *lok* [l'ɔk] 'buttocks'

r: *rak* [rak] 'south, summer'; *ren* [rɛn] 'they should'; *ri-* [ri] (person, agent)

r': *rak* [r'ak] 'duck'; *ren* [r'ɛn] 'water'; *ri* [ri] 'bone'

It is not yet clear whether this palatalization is a relic of pre-Marshallese forms stemming from Proto-Austronesian or a development in Marshallese or Micronesian. A comparative study of Micronesian languages will be necessary to answer the question. Enough has been presented to show the synchronic importance of the pairs of contrasting phonemes.

(c) SONANCY. The stop phonemes have three allophones depending upon their position in the word or syllable. The phonemes *p t k* (and their palatalized counterparts) are fully surd and unreleased in final position.³ The nasals and liquids begin sonant and end surd.—The stops are fully sonant in intervocalic position if they begin a syllable. In a non-phonemic spelling they might be represented by *b d g*. The nasals and liquids are likewise fully sonant in this position. Note, however, that Marshallese is replete with closed syllables even when the consonant is intervocalic. *Ajaj* 'tridacna pounder' is divided *aj-aj* and both *js* are treated as finals. In *abuki* 'ray fish' both consonants are treated as medial intervocalics since the syllabic division is *a-bu-ki*.—The stops in initial position begin surd and end sonant.

(d) DEGREE OF CLOSURE. The sharp ear will often detect loosely formed or even 'open stops' in Marshallese. A sound law is probably operating now to shift the intervocalic stops (as defined above) to the sonant fricatives β, δ, γ and their palatalized forms. The form corresponding schematically to palatalized δ has gone a step further and is at times virtually a feeble [ǰ] or [č]. Initially the same thing occurs sporadically, but under different conditions of sonancy. Here φ θ χ are allophones of the *p t k* phonemes and the *t'* phoneme is represented by [š] or [š̄]. Kroeber observed this phenomenon and described it in 1911.⁴

(e) LABIALIZATION. The lip-rounding of *p* and *m* often carries over to the following vowel. This produces the acoustic effect of *pw* or *mw* and hence the

³ A. L. Kroeber, *Phonetics of the Micronesian Language of the Marshall Islands*, *American Anthropologist* 13.382 (1911).

⁴ Kroeber, 384.

bw- and *mw-* spellings in the Bible. Sometimes this *w* is not omissible. In that case, it is a member of the *u*-phoneme and should be so written. The in-and-out *w* after labials should have no place in a phonemic orthography.—After *k* the *w* may be the result of the rounding influence of a preceding or a following rounded vowel.

<i>bikbik</i>	[p(w)ik(ə)p(w)ik]	to flap, flutter
<i>bwij-</i>	[p(w)ič]	navel
<i>emwij</i>	[ɛm(w)ič]	finished, already
<i>mijmij</i>	[m(w)ič(ə)m(w)ič]	operation, vaccination
<i>kenokil</i>	[kɛnək(w)il']	to stir up (fire, etc.)
<i>kejokwe</i>	[kečok(w)ɛ]	drifting or drifted
<i>jokwōr</i>	[čok(w)ər]	to stop, cease

(f) CONSONANT GROUPS. No consonant groups are tolerated within the syllable in any position. The groups found within a word are divided into the following classes:

1. Gemination. Juxtaposition of like consonants at the end of one syllable and the beginning of the next is permissible; the following occurrences have been documented: [-pp-, -p̄p̄-, -mm-, -m̄m̄-, -tt-, -t̄t̄-, -nn-, -ll-, -l̄l̄-, -rr-, -f̄f̄-].

2. Consonant plus [u] or [i]. These function as vowels.

3. Homorganic stop and nasal. The spelling shows at times a stop plus homorganic nasal; the stop is then nasalized. Nasal plus homorganic stop (as *-mp-*, *-nt-*) is permitted.

Aside from these three cases, a vowel is pronounced, but not written, between the consonants. This vowel disappears if the syllables are pronounced slowly and separately. This sandhi-law applies between words as well as between syllables. An orthographic *-mt-*, *-nk-*, *-ñp-* and others of the sort do not assimilate to [-nt-, -ŋk-, -mp-]; they become [-m(ə)t-, -n(ə)k-, -ŋ(ə)p-]. The excrescent vowel takes on the coloring of the preceding and following sounds, particularly the vowel of the following syllable. This will be treated as a part of the general phenomenon of assimilation to be taken up with a study of the vowel phonemes.

(g) GLIDES. Initial vowels may exert an assimilatory influence on the preceding 'phonetic vacuum'. In connected speech there is no such vacuum, of course. After a pause a word beginning with *u* is often preceded by a stronger or weaker [w], one beginning with *i* [i, ī] by a [j]. The half-close vowel [o] is often preceded by [ʷ], [e] by [ʲ]. Below this level the acoustic or aural effect is more likely to be that of a weak [h] that begins voiceless and ends voiced.

Medially the labial and palatal glides occur very much as in English, where a labial glide occurs between the *u* and *a* of *fluctuate* and a palatal glide between *e* and *o* in *eon*.

In absolute final position [u, o] may be followed by a [w] off-glide, [i, ī, e] by a [j] off-glide. In a few instances a glottal stop without final release has been heard. This exactly parallels the unreleased nature of the final stops in Marshallese. This last feature is apparently of rhetorical rather than phonemic importance.

REVIEWS

THE CONFLICT OF HOMONYMS IN ENGLISH. By EDNA REES WILLIAMS. (Yale Studies in English, Vol. 100.) Pp. 127. New Haven: Yale University Press, 1944.

Previous students of the conflict of homonyms in English¹ have, for the most part, restricted themselves to the materials contained in the Oxford English Dictionary. As a result, their conclusions have too often been based on subjective judgments, since the forms of words in literary English usually fail to indicate whether the loss of one of a pair of homonyms has been due to conflict between them or to external (social and cultural) influences. In this book Miss Williams approaches the subject from the point of view of linguistic geography, following the lead of Professor Robert J. Menner, whose article of the same title was published in 1936.² The studies made by Gilliéron and his followers of the conflict of homonyms in French, based on the materials in the *Atlas linguistique de la France*, provided a sound and dependable method, and she has made a conscientious and intelligent use of these models.

The principal departure from the methodology of the French school was dictated by the lack of a linguistic atlas of the British Isles, which is only partially compensated for by Wright's *English Dialect Dictionary* and *English Dialect Grammar* and by a number of specialized grammars and glossaries of the English dialects, of varying dates and varying degrees of completeness. On the other hand, the Oxford English Dictionary, with its abundance of dated quotations, provides much fuller historical material than has been available to the students of homonymic conflict in French. The emphasis in Miss Williams' book is, therefore, divided between the historical and the geographical methods; as she expresses it, she bases her conclusions 'upon facts of chronology supported and amplified by observations, necessarily incomplete, as to geographical distribution' (41).

Unlike some of her predecessors, Miss Williams does not claim too much for the theory of homonymic conflict; she handles her material with caution, and wisely excludes all doubtful cases. The result is an impressive array of individual words, in various periods of English, which have come into conflict (impressive not because of their number, but because of their apparent certainty), and a convincing demonstration of the validity of homonymic conflict as one cause of the loss of words from the English vocabulary. The seven maps facilitate the reader's comprehension of the more involved examples.

The first of the special studies deals with the conflict of two native words, *ear* 'ear' (< OE *ēare*) and *near, nere* 'kidney' (< OE **nēora* or **nēore*?). These words became phonetically similar by the middle of the seventeenth century and could easily have developed homonymy through metanalysis (*an ear* > *a near*, etc.). At the present time (except in the Warwickshire dialect, which

¹ Whose work Miss Williams summarizes briefly in one of her preliminary chapters (32-37).

² LANG. 12.229-44 (1936).

needs further investigation) *ear* and *near* in these meanings do not exist together; in the dialects in which *ear* survives (including Standard English), *near* has been replaced by *kidney*, and where *near* survives, *ear* has been replaced by *lug*. In Dutch and German, on the other hand, where these two terms have not developed homonymic conflict, both survive in the standard language (Dutch *oor*, *nier*, German *Ohr*, *Niere*).

Conflict between a native word and a foreign word is illustrated by *gate* 'gateway' (< OE *geat*, *gæt*, pl. *gatu*) and *gate* 'road' (< ON *gata*). In the dialects in which *gate* 'road' appears, the word for 'gateway' is *yate*, *yett*, etc. (from the singular of the OE word); where *gate* 'gateway' (from the plural of the OE word) is found, as in Standard English, *gate* 'road' has not penetrated. To supplement the records of the present-day dialects, which are not as extensive as might be wished, the author makes excellent use of *y*- and *g*-forms in place-names and in Middle English literary texts.

Other homonymic conflicts treated by Miss Williams which involve dialect geography are those of *queen* (< OE *cwēn*) and *quean* (< OE *cwene*), of *straight* (< OE *streaht*) and *strait* (< OF *estreit*), and of *churn* (< OE *cyrn*, *cyrin*) and *chirm* (< OE *ciern*, *cirm*), the former of which has become *churm* in certain dialects. Conflicts which she is able to study without recourse to dialect geography are those involving ME *ē* and *ĕ* (e.g. ME *hēle* < OE *hælan* 'to heal' and ME *hēle* < OE *helan* 'to cover'; ME *lēn* < OE *lēan* 'reward' and ME *lēn* < OE *lēan* 'loan') and those involving the ME diphthong *ai*, of both native and foreign origin (e.g. ME *weie* < OE *wegan* 'to move, weigh', ME **weize* < OE *wecgan* 'to shake, toss, stir', ME *waie*, *weie* < OE *wāgan* 'to deceive'; ME *faine* < OE *fægnian* 'to rejoice', ME *feine*, *faine*, *feigne* < OF *feindre* 'to pretend').³

The introductory chapters give a clear and well ordered treatment of the theory of homonymic conflict, including a discussion of other alleged causes of the loss of words. Miss Williams is probably right in minimizing phonetic slowness as a cause of obsolescence (20-21). Words such as OE *not*, *mitta*, and *cāf*, which Teichert and Oberdörffer believed were lost because of their shortness in comparison with available synonyms, are no shorter than many words which have survived, and the consonant sounds would tend to preserve them. But there are (or were) shorter English words which would have been more relevant to the discussion—words which were entirely vocalic in Old English (*ǣ* 'law', *ēa* 'river', *ā* 'always') or which became entirely vocalic in Middle English (OE *īeg*, *īg* 'island' > ME *ī*, OE *ǣg* 'egg' > ME *ei*). Of these, OE *ā* has survived as *aye* but in Standard English only in poetry, OE *īeg* has survived only in a compound with *-land*, and OE *ǣ* and *ēa* and ME *ei* have been replaced by foreign words. Lack of phonetic content is undoubtedly responsible for the failure of these monosyllables to survive; although *ǣ* and *ēa* would have become homonyms in Middle English, they would probably not have conflicted because they would not have appeared in similar contexts. The borderline between

³ The conflict of *straight* and *strait* is also treated in this category, but I have mentioned it separately above. A more complicated conflict involving ME *ai* (three ME verbs of the form *aleg(g)e* and three of the form *alaye*) is discussed by Menner, *LANG.* 12.233 f.

obsolescence through homonymic conflict and obsolescence through phonetic slightness is sometimes rather vague, since the shorter the word, the more likely it is to be confused with another.

All in all, Miss Williams' book is a first-rate piece of work and should do much to promote the application of linguistic geography to problems of historical English linguistics. If to the initiate in linguistic geography it sometimes seems that she is laboring the same point in too many places, the resulting clarity will be welcome to the beginner in this field, who, it is to be hoped, will be inspired to read further in the writings of such scholars as Dauzat and Jaberg, or even in the more difficult works of the master Gilliéron himself. Linguistic geography does not provide the answer to all problems of historical linguistics, but it has been too much neglected by students of English.

ELLIOTT V. K. DOBBIE
COLUMBIA UNIVERSITY

GAFAT DOCUMENTS: RECORDS OF A SOUTH-ETHIOPIC LANGUAGE: GRAMMAR, TEXT AND COMPARATIVE VOCABULARY. By WOLF LESLAU. (American Oriental Series, Vol. 28.) Pp. 188. New Haven, Conn.: American Oriental Society, 1945.

In this work the author attempts the arduous task of characterizing the Gafat language on the basis of a Gafat translation of a difficult and more or less obscure Biblical text, *The Song of Solomon*. From this meager source he has succeeded in extracting the most essential grammatical facts of this little-known tongue, and in filling a gap in our knowledge of the Ethiopic languages.

The work is divided into three parts, preceded by a table of contents, a preface, and introductory sections. In these last, after an enumeration of the very few documents which contain specimens of the language, the author fixes the position of Gafat with reference to the other Ethiopic tongues, concluding that, tho it has some features which do not occur in any other Ethiopic language (13), it is to be placed in what he calls the Harari-Occidental Gurague group of South Ethiopic (14).

In Part One he has a few words to say about spelling (15), and then proceeds to outline the phonology (16-32), following this by a treatment of the parts of speech, noun (33-47), pronoun (48-59), copula (60-62), verb (63-88), numerals (89), prepositions, conjunctions, and adverbs (91-98), and finally a brief summary of word order (99).

In the second part (101-38) is a reproduction of the original manuscript of the *Song of Solomon*, followed by a transliterated text with both a literal and a free translation. Footnotes to the text contain suggested corrections, comparisons with the Amharic translation, and explanations of mistranslations in the Gafat text.

Part Three contains all that we have of the vocabulary of Gafat in two parts, Gafat-English with comparative remarks (139-81) and an English-Gafat index (183-8).

The work is deserving of all praise, and with some exceptions in the treatment of the syntax, the author has given as thoro and complete an account of the

language as would seem to be possible on the basis of the available material. Some observations and additions, however, are called for.

The Geez text of the Song of Solomon, which the author was unable to obtain (cf. 101), might have served to clear up some of the difficulties presented by the Gafat text. Possibly the Greek text underlying the Ethiopic might also have helped.

The statements with regard to the manuscript used in the study are not entirely clear; p. 9 it is spoken of as MS 33, Ethiopic collection, Bodleian Library, Oxford; p. 11 it is called the MS of Bruce with apparent reference to Bruce's Travels, in which a part (recto of 1st folio) was published (cf. 10).

In citing the features that Gafat has in common with Amharic (14) the use of *balā* 'say' as an auxiliary (e.g. *dās-balā*, cf. §108) like Amharic *alā* 'say', and the use of what might be called 'circumpositions' (§112), might have been mentioned.

The treatment of the phonology is rendered difficult by the fact that the only guide to the pronunciation of Gafat is the known pronunciation of Ethiopic languages. The inferences thus drawn are probable but not necessarily correct. The term prepalatals (19) for the affricatives *č* (*tš*), *ǰ* (*dž*), *č* (*tš'*?), the palatal fricatives *š*, *ž*, and the palatal nasal *ñ*, tho used by M. Cohen in his *Traité de Langue Amharique* 33 (Paris, 1936), is inaccurate and confusing. Sievers uses the term for the front *k* and *g* sounds. The emphatic *q* is velar not palatal (cf. 21) in Semitic in general, therefore presumably also in Gafat.

The apparent interchangeability of certain consonants presents many problems. The interchange of 'prepalatals' (21), if it is not due to dialect, may be because the four letters in question (*č*, *ǰ*, *š*, *ž*), tho originally representing different sounds, have come to be pronounced alike (cf. examples of such variant etymological spelling in Amharic, viz. *h*, *ḥ*, *ḥ* = *h*; *s*, *š* = *s*; ' and ' = '), or perhaps *č* and *ǰ* fell together as *tš*, *ǰ* and *š* (>*ž*>*dž*) as *dž*, i.e. the surd and sonant of the same affricative, the surd sound being phonetically proper as initial or after a consonant, the sonant after vowels, which relationship was confused by analogy.

Eth. *z* (*z*₁, *z*₂) is regularly represented by *z* (*zebi*, *arz*); Eth. *s* (*s*, *š*₁, *š*₂), by *s* (*sābwā*, *sābārā*, *lābāsā*), tho sometimes spelt with *š* (*welbaš*); Eth. *š* (*š*₂), by *s* (*arsā*, *ashī*); Eth. *ç*₂ (*ç*₂) and Ḍappa for *ç*₃ are regularly expressed by *ç* (*ç*) except *sābānā* 'morning' (*s* for *ç*₂), *zebi*, *zebe* 'finger' (*z* for *ç*₂), *ənčā* 'tree, wood' (*č* for *ç*₃, if really equivalent to general Semitic 'ç'); *ç*₁, however, is represented by *č* in *ačāmā*, *čəfrā*, *čəlaya*, *qučrā* but by *ç* (*ç*) in *ašənt*, *riš*, *šālāmi*. This double spelling for *ç*₁ may be simply variant spelling of the same sound, but it is to be noted that Ugaritic also presents a double representation of *ç*₁, e.g. 'zm 'strong' (= 'ç₁m), 'gm' 'thirsty' (= 'ç₁m'); cf. Goetze, LANG. 17.131 n. 43.

The *č* = Sem. *ṭ* in *čāmā* (Sem. *ṭ*^{'m}), *š* for Sem. *ṭ* in *ašəl* (Heb. *ṭal*) and the *ṭ* for Eth. *š* in *qānṭuwati* (Eth. *q^uənṣəl*) must be connected in some way with the fact that common Eth. *š* becomes *ṭ* in many South Ethiopic dialects (cf. section *š* in Gafat-English vocabulary).

As many of the word complexes in the text are difficult of analysis, it would have been a convenience if prefixed and suffixed elements had been separated by hyphens from the words to which they are attached, e.g. *mā-nəṣu-š əlanā* 'like

white (-the) incense' 7, 3; $\frac{3}{2}$ lā-moyt(< əmoyt)-uwa 'for-mother-her' (not 'his' as §111c) 10, 23, bā-səmot-əǧu 'with-mouth-his' 1, 2; lā-ǧ(< əǧ)-əš 'to-one-the' 5, 10.

That the particle *mā* is used as a relative with the perfect in the two examples that seem to occur (§58b) is open to doubt. Are not the forms with initial *m* rather nouns with prefix *m* (cf. §32c, d) used in genitive construction without genitive sign (cf. §46d)? Perhaps the same thing is true of the *mā* forms in §46b.

In the section on the negative imperfect (§75a), the examples not only present difficulties of analysis but do not in a number of cases illustrate the rule given. For instance, in the first example it is difficult to determine directly what the form *yəttawāk* is; the verb *tawākā*, tho given under 'ramble' in the English-Gafat Vocabulary, occurs in the Gafat-English, not under *t* but under *awākā*; it is necessary to refer also to p. 78, where the peculiar form is discussed, before it can be understood; the second word in the example would certainly have been clearer as *m-al-honi* 'in-order-that not I-may-be', tho even then a statement that *honi* supposedly stands for *əhoni* (cf. §74 p. 67 foll., §105 p. 85) would be necessary for clearness. The absence of particle *-m* after the verb in this example and several others, apparently due to the fact that the verb stands in a dependent clause, where *-m* is omitted also in Amharic—cf. Cohen, *Traité de langue amharique* 164, 170 (Paris, 1936); Guidi, *Gram. elem. d. lingua amariña* 24 (Roma, 1892)—does not agree with the rule given, and is not explained.

A complete list of obscure verb forms in §109 would have been advisable, even tho most of them had already been mentioned in various places.

Such syntactical facts as are recorded, with the sole exception of the few remarks on word order (99), are given, as stated, in connection with the description of the forms, where they are to a certain extent hidden from view: viz. §§36, 38 gender, 43 use of plural, 45 adjective, 47 direct complement, 48 complement of relation, 49c value of personal pronoun, 54 value and use of suffixed pronouns with verb, 57 relative pronoun and relative clause, 58–9 relative with perfect and imperfect, 60–1 use of relative clauses, 64 construction of words meaning 'all', 65 distributive expressions, 66–8 expression of idea 'to be', 72, 75 expression of negative perfect and imperfect, 111f comparison of superiority (cf. 1, 3), 111i comparison of equality (cf. 2, 5), 113, 115 subordination.

The following syntactical remarks might have been added:

(a) As is stated §45 the adjective regularly precedes its noun; in *mānfās qədus* 'Holy Spirit' 11, 10; 11, 16, where it follows, the term is undoubtedly taken over bodily from Ethiopic. The author evidently takes this for granted, as neither word is listed as Gafat in the vocabularies. Predicate adjectives, e.g. 4, 4; 9, 3; 9, 4, might have been mentioned. In §44 it should be added that in phrases composed of adjective and noun, the article *-š* may be used with either, e.g. with adj. 5, 16; 7, 3; 7, 6 (cf. also article with relative clause §60); with noun, 4, 5. To judge from 2, 22 (§44c) it would seem possible for the article to occur with both.

(b) The cardinal precedes its noun, which is regularly plural, e.g. *ələčā-m bušač* 'two little ones' 12, 1; *sodsä tābawan* 'sixty courageous' 5, 7–8; the singular

is used with *ših*, e.g. *ših gašay* 'thousand shield' 6, 9; in *ših bārā ših* 'thousand dollar' 15, 5, *ših* is used both before and after its noun.

(c) Cases of apposition are *māngus Sālonon* 'King S.' 5, 12-13; 5, 20, where the appositive as title precedes, and *Gālā'ad ambolağā* 'Mt. Gala'ad' 5, 25-26; 10, 10-11, where the appositive follows.

(d) The repetition of words is in general distributive (§65), but does not always render 'each, every' directly. In *əğāš əğāš . . . əmā-gize-š* 15, 3-4, the distribution is expressed by the repetition and not by the preposition *əmə* 'in' (as loc. cit.); in *yələm mātā mātā təwāldi* 6, 2-3, the distribution is expressed twice, once by *yələm* 'all' and secondly by the repetition; a closer translation would be 'all (everyone) one twin (and) another twin engenders' (= one produces one twin (or pair of twins), another, another. The repetition in 1, 1-2 *yəh yā-Sālonon əğāwat əğə əğə*, instead of being a plural formation (§42), is probably an ordinary case of distribution, the passage meaning 'these the words of S., one word (and) another word,' i.e. 'word by word, one word after another'; cf. also the repetition in 4, 16-17. In 5, 10 both preposition and object are repeated.

(e) The construction of modifying adverb and adjective is exemplified by *tābwā gunā* 'very good' 6, 24, in which the adverb precedes.

(f) Indefinite adjective 'much' is expressed by *əğəgu*, 'many', by *tābo*, *tābu*, which precede the noun like descriptive adjectives, e.g. *əğəgu əgā* 'much water' 14, 12; *əmə-tābo-š fārā* 'of many fruits' 7, 6; in 12, 6 *əğəgu* has apparently the sense of 'many'; it also occurs as an adverb 'very much' modifying a verb 12, 15; *tābu-s* 9, 4 is a pronoun; *aiyalan* is given for 'many' in the vocabularies pp. 146, 186, but does not occur in the text. 'Others' is *welan*, a plural form. Adjective 'no' is expressed by *mənač* before its noun in connection with a negative, e.g. *mənač nāwr . . . albem* 'any defect there is not' 6, 16-7. In the vocabulary (175) *šīlan*, apparently a plural form, is given as 'few', *šəṭet* 14, 17, *šəṭaṭač* (pl.) 4, 5 mean 'small', *šəṭet* 4, 20 seems to be an adverb, 'a little'. The idea of 'such, like this' seems to be expressed by *ədeñyeto yəbəl* 'thus he says' 8, 26 (cf. §111j).

(g) The indirect yes-or-no question is expressed by *əndānto* 'whether' 11, 7 (cf. §113d); no examples of indirect information questions occur.

(h) 'To have' seems to be expressed by the construction for 'there is' without prepositional phrase indicating the possessor, cf. §§67-8, e.g. *mākənfa-š təkusi yənačo* 14, 10-1 'his wing heat there is' (= his wing, it has heat); *ṭabuwā albem* 14, 17-8 'breast there is not' (= she has no breast). In *lā-ğ-əš* 5, 10 'to have' is expressed by the preposition *lā* alone.

(i) In §115, as the Akkadian particle *-ma* with which the Gafat *-mā* is compared has a variety of uses, the one corresponding to the Gafat use might have been more explicitly stated or exemplified. An Akkadian example in point is Gilg. I, 2, 45 *imur-šu-ma šādu uštāhriru pānu-šu* 'when the hunter saw him, his face filled-with-fear'; cf. Ungnad, *Babylonisch-Assyrische Gram.*, München, 1906, §32e.

It would have been well to call attention to important classes of words and constructions which are missing in the specimens of the language that we have, e.g. the following.

(a) The demonstrative does not occur as an adjective, tho to judge from the

analogy of other adjectives, both descriptive and limiting, it would be rendered by the pronominal forms before the noun.

(b) The interrogative adjective 'which', the genitive of the personal interrogative 'whose', and the pronominal and adjectival expressions 'how much', 'how many' are not found.

(c) Some important indefinite pronouns and pronominal adjectives are missing, e.g. 'same', 'some one', 'so-and-so', 'enough', 'too much', 'too little'.

(d) No ordinal numerals occur, tho the adverb 'first' is expressed by *yətfānā* 6, 19; nor are either cardinal or ordinal adverbs found (e.g. 'three times', 'thirdly').

(e) The coordinating conjunctions corresponding to 'but', 'or', and the subordinating corresponding to 'before', 'after', 'since', 'altho', 'as—so', 'as if', and 'so that (result)' are lacking.

(f) Noun clauses corresponding to those introduced by 'that', and indirect information questions introduced by 'who', 'what', 'where', etc. are not found, tho an indirect yes-or-no question does occur (cf. above).

The source of words not in The Song of Solomon, tho usually given (cf. *amam* 143, *ammaqieti*-š *ibid.*, also *passim* 144–80), is occasionally omitted, e.g. *aiyalan* 'many' (under *ayl* 146; Beke is mentioned as source §31g), *šitan* 'few' 175. Sometimes a word is difficult to locate in the vocabulary, e.g. *aiyalan* above; according to the alphabetical arrangement (139) it should have been listed with cross-reference to *ayl* before *aba*: *māšəčā* (*šəčā* with prefix *m*, cf. §32c) is listed only under *šəčā*; *māngus* (*nəgus* with prefix *m*) is not listed at all either under *nəgus* or under *m*.

Some suggestions might be made with regard to the etymologies in the Gafat-English vocabulary: *aba* is perhaps better connected with Eth. *haba*; *bazəñ* would seem to contain the preposition *b* + demonstrative particles *z* and *n* + the *y(a)* which occurs in Amh. *bāzya*; if *gize* is Cushitic, as implied p. 158, it is hardly to be analyzed as *gi* (= Semitic *gu*) + *ze* 155; the equating of *ənča* and Eth. 'əš (*š* used here for Dappa, representing *ç*) 143, of *ət* and *əskə* 146, and of Gab. *fāyā* and Arab. *farr*, seems questionable; *fārād*, *fārd* may be a Cushitic loan word in its entirety and not Semitic *fārās* modified by Cushitic influence; *zāyat*, *zayač* 181 would seem to be due to a wrong division of *māzayač* (= Eth. *maḥazā*), following the analogy of the numerous nouns which occur both with and without prefixed *mā*, e.g. *nəgus*, *māngus* (§32c).¹

FRANK R. BLAKE
JOHNS HOPKINS UNIVERSITY

GRAMMATIKA KOMI-PERMÄTSKOGO ÄZYKA. By I. I. MAIŠEV. (Akademia Nauk SSSR, Institut Äzyka i Myšleniä im. N. Ä. Marra, Trudy, XVIII; Seriä Fenno-Ugrica, No. 2.) Pp. 83. Moscow-Leningrad, 1940.

¹ Among the mechanical defects in this book, the following are the most serious: 57, in the statement 'the relative is often used without determined', read 'antecedent' for 'determined'; 60, in the statement 'the copula is placed at the end', read 'predicate' for 'copula'; 101, 'literary' should of course be 'literal'; 144, the first line of the second title *əndeñ* is dittography from the preceding title, and the second line seems to refer to *ədeñyeto* 'thus' already given 141 top.

The name 'Permian', as used by both ethnologists and linguists outside of Russia, refers collectively to the Votyak and Ziryen peoples and languages. In addition to Votyak (known in Russia as Udmurt) and Ziryen (known there as Komi), Russian scholars traditionally distinguish a third group, known in their literature as Komi-Permätskiĭ (hereafter abbreviated as Kp). Linguists of the West regard this distinction as erroneous, stating that it is based on geographic rather than linguistic considerations. They classify Kp simply as another slightly different, subtype of Ziryen.¹

The linguistic classification of Ziryen dialects is generally, though of course arbitrarily, based on correspondences of Proto-Ziryen /l/. Many other isoglosses coincide with this division, although the majority actually cut across the boundaries established thereby. Using the criterion mentioned, the following four Ziryen dialect types may be set up.

Type One: /l/ is preserved finally and before consonants. E.g. /lol/ 'soul', /kylny/ 'to hear'. This type is spoken along the rivers Sysola, Kobra, Luza, Letka, parts of the Upper Vychegda, the Upper and Middle Pechora, in the dialects of the northern part of the Kp district, and in the Ziudzin dialect.

Type Two: /l/ changes to /v/ finally and before consonants, but is preserved elsewhere. E.g. /lov/ 'soul', /kyvny/ 'to hear'. This type is spoken along the rivers Vychegda, Lower Sysola, and Luza, and around Ob'ächev.

Type Three: /l/ changes to zero finally and before consonants, but is preserved elsewhere; the vowel preceding the zero doubles, except /e/ > /ej/. E.g. /loo/ 'soul', /kyyny/ 'to hear', /zej/ 'very'. This type is spoken along the rivers Udora, Vym', Vishera, Izhma, Lower Pechora, Mezena, and on the Kola peninsula. It is also spoken by some 3000 workers transported to the Ob' river region in recent times.

Type Four: /l/ changes to /v/ in all positions. E.g. /vov/ 'soul', /kyvny/ 'to hear'. This type is spoken only in the southeastern corner of the Ziryen territory, namely along the In'va and Obva.

The 2nd type, the one described in the grammar under review, has been adopted as the norm for the literary language of Ziryen communities, and is now so used. The author, who evidently designed his book for practical purposes, devotes much space to a discussion of the spelling of Kp (13-9, 43, 52, 58, 73, 76, 79). The history of this subject—of extraordinary interest because it reflects the development of Soviet nationalities and minorities policy, which is remarkably wise and which 'accords with the best scientific knowledge and the most enlightened moral principles'²—falls into three periods. In 1925, the Kp national district accepted the alphabet in use by the Komi proper. This alphabet, cyrillic in type, was in principle similar to the modern Serbian script. Actually, however, there is very little literature so written. In 1932, both the Kp and the Komi, under what the author calls 'nationalistic pressure', adopted romanization; henceforth, all literature and the press appear in Latin script,

¹ Thus Miklós Zsirai, *Finnugor rokonságunk* 204, 207 (Budapest, 1937). On the other hand, cf. e.g. *Bol'shāa Sovetskaā Ėntsiklopediā* 33.612 (Moscow, 1938).

² Louis Wirth, *The Problem of Minority Groups*, in *The Science of Man in the World Crisis* 370 (ed. by Ralph Linton; New York, 1945).

until 1937-8, when finally, 'under the pressure of the masses',³ the Kp and the Komi both changed to a cyrillic alphabet, generally modelled on Russian. In this script—used, of course, by Maišev in his book—palatalization of consonants is indicated, wherever possible, by Russian palatalized vowel symbols, or, when these are not available, by the 'soft yer'. Affricates are written by unit symbols if the Russian alphabet affords a sign, otherwise by clusters of symbols.⁴

Turning now from the script to the phonemes, the following system—here transliterated in slightly modified IPA symbols—emerges more or less clearly.

The chief difficulty arises in attempts to mark suprasegmental features. In scattered statements by the author, there appears evidence for a phonemic stress in the language: for example, he shows that stress alone differentiates certain otherwise homophonous verb forms and verbal nouns, and verb forms of various aspects (20); he further corroborates this observation in his statements on adjectives (48-9), numerals (52), and verbs and verbal nouns (72-3), and in his division of suffixes into stressed and unstressed. On the other hand, in the section where he directly discusses the matter (10-1), he claims that 'the question of stress in Kp has hitherto been little investigated' and quotes examples of dissyllabic words which may be stressed on either syllable without any change in meaning; he also gives examples where the stress is fixed. Moreover, he marks stress only in the illustrations noted, so that the great bulk of the quoted forms appears without stress marks.

The segmental features may be isolated with much greater ease. There are seven vowels, with two distinctive features: high-mid-low, front-central-back (in high and mid positions only); they may be charted as follows:

i	y	u
e	ö	o
<hr/>		
a		

³ Changes in Soviet policy are correlated with the following historical events. On 8/22/1921, the central government granted autonomy to the Komi (i.e. the Ziryens between 46° and 66° latitude, 59° and 70° longitude), on a territory of 478,662 km². Of over a quarter million inhabitants in this territory, 92% are Komi, 6% Russian, 2% Samoyed. On the other hand, the southern Ziryens (i.e. the Kp of the Kama region), who probably split off from the Komi even before their conquest by Moscow in the 15th century, now became formally and politically separated. Thus they failed to participate in the cultural and economic development of their linguistic relatives to the north. For years afterwards, Ziryen nationalists, basing their argument mainly on linguistic grounds, pressed for union with the southerners, who constitute about 40% of the total Ziryen population (in 1933, there were about 201,000 Kp, occupying 23,000 km² in the Sverdlovsk oblast'). Their situation has much improved, as indicated by these selected figures: in 1936, there were 39 books printed in Kp; there were 3 district and 4 regional newspapers; by 1935 literacy had risen from a pre-Soviet 20% to 90%. Cf. BSE 33.614 (1938).

⁴ Written Ziryen, it may be noted here, dates from the 14th century. St. Stephen of Perm (1335-96) devised for them the so-called abur alphabet, which is based, not on the even earlier Ziryen pas-marks (runes of a sort), but on Russian and Greek script. Bishop Stephen's alphabet emphasized the Ziryens' desire for cultural independence from Moscow. Later priests, however, serving the interests of the imperial government, while conducting compulsory Christianization, not only allowed the script to fall into disuse, but destroyed almost all evidence of it. Only a handful of fragments—of very great linguistic value—survive.

There are twenty-nine consonants, which may be charted thus:

p	b	f	v		m	
t	d	s	z	c	n	l, r
t'	d'	s'	z'	c'	n'	l'
		š	ž	č	ž	j
k	g	x				

The third row contains the palatalized consonants, which contrast with the palatals of the fourth row. The third column contains the affricates. The other symbols have conventional IPA values.

Mašev distinguishes ten parts of speech, each defined in terms of meaning, and each named both in Russian and in Kp. This seems to indicate that he follows the conventionally accepted treatment in Kp reference grammars for native readers. The ten parts of speech are nouns, adjectives, numerals, pronouns, verbs, adverbs, postpositions, conjunctions, particles, and interjections. He groups the first six together under the heading 'independent words', contrasting them with 'service words'. The distinction is based on the semantic definition that 'independent words' denote objects, qualities, actions, and so forth, and 'are parts of the sentence', whereas 'service words' show the relationship between 'independent words' or different sentences, and 'are not themselves part of the sentence'. This procedure is characteristic of the book as a whole.

The Kp noun may be plural (indicated by the suffix *-ez*: /mortez/ 'men', /tuje/ 'roads', /puez/ 'trees'), or singular (indicated by the absence of the plural suffix: /mort/ 'man', /tuj/ 'road', /pu/ 'tree'). There are seventeen cases in each number. Mašev divides them into three groups: subject-object (i.e. actor-goal) cases (1-10), interior-local cases (11-3, meaning roughly 'inside of', 'out of', 'into'), and external-local cases (14-7, meaning roughly 'to', 'from', 'about [locally]', 'until'). The following sentences illustrate the use of each case.⁵ (1) /mort. munö kerku dynöt/ 'A MAN passes by the house'; (2) /ruc'lön kerku vööm jyis', a köin.lön puis'/ 'the FOX's house was of ice, the WOLF's was of wood'; (3) /mort.lis' c'er bos'ny/ 'the ax was taken FROM THE MAN', /sija oškis brigada.lis' uš/ 'he praised the work of THE BRIGADE (coming from the brigade)'; (4) /me semi vöv.lö turun/ 'I gave THE HORSE hay'; (5) /sija gižö pis'mo./ 'he writes A LETTER'; (6) /me kerala c'er.ön/ 'I am cutting WITH AN AX', /munam vörö c'er.ön/ 'we go to the woods WITH AN AX', /nija munisö vör.ön/ 'they went THROUGH THE WOODS'; (7) /ötik kukan' kol'c'c'is va doras mijan kukan'.köt/ 'one calf remained near the river WITH OUR CALF'; (8) /ruc' kerku-tög lois/ 'the fox remained WITHOUT A ROOM'; (9) /möš donažyk bal'a.s'a/ 'a cow is more expensive THAN A SHEEP', /von.s'a nekin ez lok/ 'EXCEPT FOR THE BROTHER nobody came'; (10) /vonys munis turun.la/ 'his brother went FOR HAY'; (11) /c'el'ad' orsöny kerku.yn/ 'the children are playing IN THE HOUSE'; (12) /vör.is' petis oš/ 'OUT OF THE WOODS came a bear', /ruc'lön kerku vööm jy.is', a köinlön pu.is'/ 'the fox's house was OF ICE, the wolf's was OF WOOD';

⁵ The symbol /./ separates suffixes from stems. The capitalized part of the corresponding English translation refers to the sequence of phonemes not separated by space and including /./, for purposes of illustration in this review.

(13) /soj pyris kerku.õ/ 'the sister went INTO THE HOUSE'; (14) /me muna vör.-lan/ 'I am going TOWARDS THE FOREST'; (15) /sija munis kerku.s'an/ 'he went FROM THE HOUSE', /eta tulys.s'an/ te byčõma užalan/ 'SINCE THIS SPRING you are working well'; (16) /võv gönitõ viž'.õt/ 'the horse is running ABOUT THE MEADOW', /sija kutõ kos.õt/ 'he holds (her) BY THE WAIST'; (17) /me muna vör.-õž/ 'I am going TO THE FOREST', /sija völi okt'abrsköj revol'ucija.õž/ 'this was UNTIL THE October REVOLUTION'. Preceding the case suffixes, there may be possessive suffixes, and a determinative suffix fulfilling the functions of a definite article. Mašev's division of nouns into proper nouns and nouns that can denote a number of persons or objects seems not to be based on a morphological distinction; however, though he does not say so in so many words, we may suspect that proper nouns are not used with the determinative suffix. His several declensional classes are entirely arbitrary, being based on the latest Soviet spelling.

Adjectives are indeclinable and precede the declined noun: /kuz' tuj.lis/ 'OF THE long ROAD'. They may, however, be compared; the comparative suffix is *-žyk* (/yžyt.žyk/ 'bigger', /kuz'.žyk/ 'longer'), and the superlative prefix is *med-* (/med.yžyt/ 'biggest', /med.vyna/ 'strongest').

Numerals are treated under cardinals, collectives, fraction, and ordinals. Cardinals are used with the noun in the singular and are indeclinable in this function; otherwise they are declined with all of the nominal suffixes. Collectives can be illustrated by /õtnam/ 'I alone', /õtnany/ 'we alone', /kuimnannys/ 'the three of them'. Only one fraction exists, /žyn/ 'one half', which is probably a noun; other fractions are translated by phrases of the 'one third part' type. Ordinals are formed by the addition of either of two suffixes (*-õt* being used predominantly); they pattern morphologically and syntactically with the adjectives, since they are indeclinable and precede the noun.

Pronouns are treated in nine classes, namely personal ('I, you . . .'); personal-determinative ('I myself, you yourself . . .'); possessive (actually only a reflexive possessive; other functions of the possessive pronoun are translated by the genitive of the personal pronoun); demonstrative ('this, that . . .'); interrogative; relative (actually identical with the previous, but listed separately); determinative ('any, all, such, so much . . .'); negative ('nobody, none, nowhere . . .'); and indefinite ('somebody, something . . .').

The personal pronouns have a case system identical with that of the nouns, but with a different set of suffixes (morpheme alternants) for the 3rd person singular and plural. The personal-determinative pronouns again have an identical case system, but a different set of suffixes in all three persons and both numbers. The demonstratives are indeclinable, unless substantivized. Of the interrogative, relative pronouns /kin/ 'who' and /myj/ 'what' have plural forms /kinnez/ and /myjez/; /köda/ 'which' takes plural possessive suffixes: /ködnym/ 'which one of us', /ködnyt/ 'which one of you' etc., and these possessive forms are declined as the corresponding noun. Of the determinative pronouns, /byd/ 'any' and /bydsa/ 'all' are noun determinants and indeclinable; /bydös/ 'all' takes possessive suffixes but no case suffixes; /bydön/ 'all (pl.)' takes both sets. The negative pronouns are declined according to the

same pattern as the corresponding non-negatives. The indefinite pronouns take nominal suffixes of case and number, preceding the suffix *-kō*: /kinkō/ 'somebody', /kinn.ez.lön.kō/ 'some people's'.

The Kp verb has four tenses (present, future, definite past, indefinite past), an infinitive, a verbal noun formation, an imperative, a number of aspect-modal infixes, and participles. The contrast between present and future occurs in the third person only. The indefinite past denotes action similar to the English 'you seemed to go' etc., and exists only in the 2nd and 3rd persons. The verbal noun is formed from the infinitive by either one of two partly interchangeable suffixes; it has a declension in four cases and can take possessive suffixes which follow the verbal noun suffix. There is a negative conjugation in Kp analogous to the negative conjugation of Finnish (/me og mun/ 'I don't go', /en mun/ 'don't you (sg.) go!', /edö munö/ 'don't you (pl.) go!' etc.). The author gives two auxiliary verbs, /vövny/ 'to be' and /lony/ 'to become', but these differ from other verbs merely in certain particularities of morphology, and not at all in syntax. The aspect-modal infixes (Mašev calls them 'modal' only), nine in number, express a particular mode or aspect of a verbal action and can be added singly or in combinations of various sorts. The three participial forms are an active present, a passive past, and a negative passive past.

The author divides adverbs into those of mode, time, place, measure, and cause. Morphologically, however, they appear to fall into two groups: unit stems and derivatives of other stems, mainly adjectival and nominal, formed by addition of various suffixes. The most frequent adverbializing suffix (added to adjectives) is *-a*. Comparison is possible only in the comparative degree, formed by the comparative suffix *-žyk* followed by the *-a*.

The postpositions fall into four categories: space-time (with internal local endings), as in /böra munis sy dyn.ö baran/ 'again came to her the sheep', /otpyr ruc' munis sy dyn.is' vörö/ 'once upon a time the fox went FROM her into the forest'; cause-goal, as in /jylis'/ 'about, because of', /ponis'/ 'out of, on grounds of'; comitative, as in /čötu/ 'together, at the same time', /sorön/ 'together', or, doubling the suffix of the comitative case (6 above), /sy.ön sor.ön nija ivan ordis' i munisö/ 'WITH this they went and left Ivan'; 'qualitative equality', as in /myj pas'ma. mu tenam s'in ož'yn/ 'what is the earth BY its extension before your eyes', /mymda/ 'by quantity', /s'ökta/ 'by weight'. There are also postpositional pronouns, that is, postpositions with personal suffixes, comparable to similar forms in Hungarian.

Conjunctions are briefly treated, as words which serve 'to connect equivalent parts of the sentence or various sentences'.

Particles are of two sorts, syntactic and morphological. Syntactic particles express question, statement, doubt, etc.; they include the question particle /ja/, the affirmative /taj/ (used in sentences of the type 'but I DID go home'), and the doubt particle /ni/ 'already' (as in 'did you write it already?'). The morphological particle /kō/ was treated above in connection with the indefinite pronouns. It should be, in the opinion of the reviewers, classified as a suffix rather than a separate particle.

Among the interjections, the author places a number of onomatopoeic expressions and call-words, without either translation or explanation.

It should be clear from the foregoing that this work is not a structural grammar that can be used with profit for comparative Finno-Ugric or general linguistics. Adequate though Mašev's book may be for use in Kp schools, the job of describing the language by modern linguistic methods still remains to be done.⁶

THOMAS A. SEBEOK
PAUL L. GARVIN
INDIANA UNIVERSITY

KOTA TEXTS: PART ONE. By M. B. EMENEAU. (University of California Publications in Linguistics, Vol. 2, No. 1.) Pp. vii + 191. Berkeley and Los Angeles: University of California Press, 1944.

In this first major publication to result from his years in India, Emeneau shows how valuable it is for linguists to obtain the thorough and unhurried acquaintance with a language community which these years in India gave him. Emeneau publishes here eleven myths and tales in phonemic transcription, with translation and brief notes (38-191). This is preceded by a sketch of Kota grammar (15-29) and a short text with detailed linguistic analysis (30-5).

Kota is one of a small group of isolated Dravidian languages spoken in the Nilgiri Hills of South India. Almost no linguistically valid work has been done before on Kota, and little enough on the whole Dravidian family. Emeneau's work in Dravidian is the major achievement in this field. He is a master of linguistic method, and has produced in his brief sketch of Kota a model of compact description. The sketch introduces a number of innovations in analysis and presentation, not least of which is the very neat manner of indicating the many successively included quotations in Kota by successive subscript numerals (§4). The large body of texts permits other linguists to test Emeneau's analysis, and to search for morphological details and for syntactic and stylistic features.

Emeneau lists his phonemes in groups of those which have correspondingly differing positional variants in corresponding environments, thus achieving a very compact statement. He says that there are two prosodemes of vowel quality, short (unmarked) and long (marked by /·/), yielding /a/, /a·/, etc. This type of interpretation (for which he refers to Trager's Theory of Accentual Systems in the Sapir Memorial Volume) is based on the fact that the /·/ phoneme differs from the others by being not an independent phoneme but some sort of process, a lengthening of the vowel (or consonant) phonemes. Such a view is of course entirely admissible and often convenient. It is however also possible to take a different view of /·/. It may be considered as merely a phoneme whose positional variants are second moras of long vowels: after /a/ the positional variant of /·/ is another /a/-quality mora, and so on. Complete phonemic overlapping is not involved, since the /a/-mora is a member of /·/ only after /a/, in which position it is not a member of /a/. Furthermore, in many languages it will be

⁶ Cf. Sebeok, *The Finno-Ugric Language Family*, SIL 2.91-5 (1944), and especially §51, for some of the needs of Finno-Ugric linguistics.

found that the second mora of each vowel is not even identical with the first mora; they may all contain some common phonetic feature (in Moroccan Arabic, an approximation of the tongue toward centered vowel position) thus making it all the easier to consider them variants of one phoneme in the usual sense. It should also be noted that /·/ is not phonetically suprasegmental; it represents features of sound which occur not simultaneously with other segmental phonemes but among them in the time succession. It is often convenient, therefore, to consider /·/ a prosodeme or suprasegmental phoneme only if it has peculiar limitations of distribution, especially if it functions like stress patterns or intonation contours.¹

Emeneau recognizes four secondary phonemes, or junctures: utterance final /./, /?/, /ɛ/, and phrase-final /,/ occurring within the utterance. He also notes: 'Within a phrase, i.e. a section of utterance between two secondary phonemes, the first or only syllable of the first word has primary stress accent, the first or only syllable of each succeeding word has secondary stress accent. All other syllables are unaccented.' This could be integrated with the juncture listing, by recognizing a word-juncture phoneme whose phonetic value is a stress contour (loud on the first vowel after the preceding juncture, zero otherwise), and by saying that all the other junctures, in addition to marking the intonation or pause by which they are defined, also mark a particular stress contour which extends over the stretch between any two occurrences of them and is phonetically equivalent to the contour between word junctures. The first vowel in a phrase would then have two loud stresses, one due to its position relative to the word junctures and the other due to its position relative to the other junctures, and would therefore be extra loud. Since there is thus a phonetic and distributional feature common to all the non-word junctures, this situation might perhaps be described by recognizing a single phrase (non-word) juncture which would always have the phrase-stress contour value.² The three intonations would then be phonemic components which only occur simultaneously with the phrase juncture (i.e. they would be quality differentiations of it). Phrase juncture plus assertion intonation equals the /./ phoneme. Phrase juncture occurring alone equals the /,/ phoneme. The chief convenience in this analysis lies in our being able to say that the stress contour occurs automatically between every two word junctures and again between every two phrase junctures, instead of saying that it occurs over every previously undefined stretch between any secondary phoneme and any (identical or other) secondary phoneme.

In a very clear section entitled *Phonological Operations* (§§5-14), Emeneau gives the morphophonemic statements. The model he uses is explicitly stated: For every morpheme he assumes a base form, which is composed not of phonemes but of morphophonemes. When the morphemes occur in words (i.e. in speech), the morphophonemes of their base forms are replaced by the correspond-

¹ Here, as in the other cases below, the alternative analyses are given only for their own sake and as examples of possible methods of analysis. They are in no way presumed to correct or amplify Emeneau's interpretation.

² Identical in phonetic form, but not in extent, with the phonetic value of the word juncture.

ing phonemes: morphophoneme *k* by phoneme /*k*/, and so on. In some cases the replacement is not by the corresponding phoneme but by some other; e.g. morphophoneme *n*, when it is due to follow a morphophoneme *l*, is replaced by phoneme /*ŋ*/. This occasional non-corresponding replacement is, of course, the only reason for the setting up of base forms and morphophonemes.

In the Kota material, two levels of replacement are distinguished. Morphophonemic operative rules, whether automatic (applying to all cases of the morphophonemes involved) or non-automatic (applying to the morphophonemes only in particular morphemes), yield words from the base forms of the one or more morphemes of which each word is composed. The words themselves, however, have different phonemic forms in different environments; these differences in forms are given by rules of external sandhi, which, as is noted in §8, often coincide with the morphophonemic operative rules. The need to set up a second base form, the basic word by the side of the basic morpheme, and the inconvenience of having two sets of replacement rules which largely coincide, can be avoided if we accept Emeneau's fundamental model, but in a slightly modified form. We would set up base forms of morphemes, whose elements are morphophonemes, and say that when these morphemes occur in speech (not merely in the word) the morphophonemes are replaced by phonemes. Whether a given morphophoneme is replaced by its analogous phoneme or by some other phoneme, depends on the other morphophonemes, junctures, and morphemes which occur around it in the utterance. Non-automatic replacements will then be those that involve some particular morphemes; automatic replacements will be all others. If a replacement involves certain neighboring morphophonemes to the exclusion of any juncture, it is what Emeneau calls a morphophonemic rule, i.e. it operates only between morphemes within a word: morphophoneme *y* is replaced by zero when it follows morphophoneme *č* within a word (*piřuko* 'he clenched', from base forms *piřč-*, *-yuko*; cf. *polŋgyuko* 'he had social intercourse according to caste or intercaste rules'). If the replacement operates whether or not a juncture appears in the immediate environment, it is equivalent both to a morphophonemic rule and to a rule of external sandhi: morphophonemes *ty* are replaced by zero when they precede morphophoneme *t* or **t* (where *** indicates word juncture; *katir-* 'knife-to cut', *ka*tač* 'knife and stick', from base forms *katy* 'knife', *tayr*,³ *tač*). If a replacement occurs only when a juncture is in the immediate environment, it is what Emeneau calls a rule of external sandhi: we would say morphophoneme *X* is replaced by phoneme *Y* when it precedes **Z* (not *Z* alone). In all these cases, the only juncture in question is word boundary; no Kota replacement is affected by features across a phrase juncture.

The coalescing of morphophonemics and external sandhi, by making juncture part of the environment which determines replacements, is merely a very minor modification of the Kota analysis. The model used by Emeneau in this analysis is probably the clearest way of treating morphophonemic phenomena, and most convenient for many languages. It is worth noting, however, that it is possible

³ Replacement of *ay* by *i* is due to another rule.

to present the same facts in quite a different manner. Instead of using the model of base forms composed of morphophonemes, it is possible to speak directly in terms of the observable morphemes and phonemes. We then say that each morpheme is composed of phonemes, but that in some cases we find two or more morphemes which are complementary to each other and function distributionally as one morpheme. We therefore treat these two or more as positional variants of one functional morpheme and state in what environment each variant occurs. If the difference between the variants affects only one or two phonemes, we may accept one variant as being primary, and say that when the given morpheme (in its primary variant) occurs in a particular environment, these phonemes are replaced by others. This parallels the non-automatic morphophonemic or external sandhi rules. If the difference appears in all morphemes which have a particular phoneme or phoneme sequence, we say just that, and so parallel the automatic rules: all morphemes ending in /ty/ have variants without the /ty/ when a morpheme beginning with /t/ follows (after zero or # juncture). The whole morphophonemics and sandhi thus becomes a series of statements about variants of morphemes.

When we consider Emeneau's syntax (§§15-31) and morphology (§§32-68) sections, we find a summary description of word classes, utterance types, and constructions of word classes, nouns, verbs, and particles. It may be instructive to see how this analysis can be summarized in a slightly different presentation.

If we ask what morpheme classes Emeneau has found, we obtain the following:

noun-stems (<i>n</i> , §§32-4)	verb stem derivation (<i>S</i> , §§48-53) ⁴
verb-stems (<i>v</i> , §§42-7)	verb stem extensions (<i>e</i> , §59)
interjections (<i>i</i> , §16)	non-finite (gerundial) stem extensions (<i>g</i> , §63)
particles (<i>P</i> , called particles of the second class, or indicators of sensations, §§16, 65)	tense and modal suffixes (<i>m</i> , §§55-8, 61)
relation suffixes (<i>R</i> , §31)	the suffix -k of the argumentative and volutative (§§54, 57)
particle nominalizers (the suffix -n, §23)	personal suffixes (three sub-classes <i>E</i> ¹ , <i>E</i> ² , <i>E</i> ⁴ , §54)
particle suffixes (<i>p</i> , §67)	finite suffixes invariant for person (<i>f</i> , §60)
secondary noun derivation suffixes (<i>s</i> , §36)	non-finite suffixes invariant for person (<i>F</i> , §§62-3)
case-suffixes (<i>c</i> , §§33-4)	
deverbal noun derivation (<i>d</i> , §17)	
denominal verb derivation (<i>D</i> , occurring with only a few noun stems, §17)	

Each morpheme in a morpheme class has essentially the same distribution relative to the other morpheme classes as any other morpheme in the same class. There are, however, various special sub-classes within some of the classes, consisting of morphemes which have distributions partially different from those

⁴ This includes the transitive suffix, whose chief form is č, and the mediacy suffix, whose chief form is kč. Since the two apparently do not occur together, and since the transitive meaning is implicit in the mediacy suffix, the latter could be broken into two: -k- 'mediacy', -č- transitive. This partition, however, would have the drawback of yielding a morpheme which is limited to occur only with the transitive.

of the other members of their class. There are many such sub-classes among the verb stems (§§43-7); verb stems also differ in the form of the transitive suffix that occurs with them, or in their non-occurrence with the transitive suffix (§§48-52). Among the noun stems, the pronouns (personal §38, demonstrative §39) and the numerals (§40) have special restrictions. So also does the noun stem *giX* 'the like' (§27)⁵ which occurs only as second noun in the copulative construction, i.e. as N^2 in $N^1 N^2 = N$.

While each noun and verb stem has here been considered a single morpheme, many of them have two forms (called by Emeneau absolute and oblique for nouns, S^1 and S^2 for verbs). It is not necessary to regard these dual forms as constituting dual morphemes, or as involving any process other than morphophonemic alternation.

In the case of the nouns, where both forms are identical in most stems, we need merely take the stem before oblique case suffixes as normal. Usually, the noun in the absolute case is identical with this, but with a zero case suffix. When we find a stem which has a different form in the absolute (e.g. *marm* 'tree', *mart-k* 'to yonder tree'), we may say that the change itself is the suffix of the absolute case (e.g. change of *t* to *m*); or we may say that here, as elsewhere, the absolute case suffix is zero, but that these stems have a special positional variant which occurs only before the zero suffix.⁶

In the case of the verbs, we can say that each stem has a special positional variant when it occurs before certain suffixes. The variant ($= S^2$) is marked in most cases by the addition of *y*, less frequently *t*; but some stems have more complicated variations (§§43-7). Even the situation described in §59, where $S^2 +$ the morpheme *ul* $= S^1$, can be described in these terms. We would say that the verb stems occur (a) before person-invariants like *-ve-ro* 'must' (§60), and (b) before future, voluntative, imperative, and other suffixes, as well as (c) before potential, irrealis, present, past, argumentative, and other suffixes. We would further say that the stems have their special variant form when they occur before the (c) suffixes, or before *ul* + the (b) suffixes.

Similarly, the two third person forms *-a* and *-o* (indicated by E^1 and E^2) can be considered variants of one morpheme. We say that the morpheme *-o* has a variant *-a* when it follows the potential or irrealis morphemes, and in some other positions. E^1 below will therefore represent Emeneau's E^1 and E^2 .

The interrelations among these morpheme classes can be expressed in a manner which will show their relation to the immediate constituents of the utterance types. To do so we need merely indicate by means of equations what sequences of morphemes can be substituted for what single morpheme classes in the utterances in which they occur.⁷

In the first place, if we include the zero of the absolute case as a case suffix,

⁵ *X* represents whatever follows the $\check{C}\check{V}$ of the preceding noun stem: *puj* 'tiger', *puj giX* 'tigers and the like'. The 'and' is not part of the meaning of *giX*, since it occurs in all cases of the construction $N^1 N^2 = N$, as in *im a-v* 'buffaloes and cows'.

⁶ Equivalently, we may say that the pre-oblique case form is a variant of the other.

⁷ Emeneau has already done this in part in the equations $S^2 - ul = S^1$, etc., in §59.

and one or two zero suffixes for the verb stem (e.g. the singular person after the imperative, or a zero member of *d*), then neither the noun stems nor the verb stems ever occur without suffixes, and the latter need not be mentioned in our final statements about the structure of utterances. In particular:

- $ns = n$ (I.e. a primary noun stem can be substituted for a secondary one which is composed of some noun stem plus a derivation suffix.)
- $vd = n$ (I.e. a primary noun stem is distributionally equivalent to a verb stem plus deverbal noun-deriving suffix.)
- $nc = N$ (I.e. noun stems, whether primary *n* or composed of *ns* or *vd* to which *n* is equivalent, always occur with case suffixes; this sequence will be marked *N*.)⁸
- $nD = v$
- $vS = v$
- $ve = v$
- $vgF = vF$ (Stems before non-finite endings *F* may or may not have the intervening suffixes of *g*: in *S*²-mel 'if one does' and *S*²-*t*-mel 'if one has done' the stem and stem plus *t* are distributionally equivalent.)
- $mE^{1,3,4} = E^{1,3,4}$ (Since the tense and modal suffixes never occur without a personal suffix, it is sufficient to indicate only the personal suffix. If we are willing to accept a few zero members of *m*, e.g. in the indicative present and the imperative, we can also say that *E* never occurs without *m*, so that writing *E* will always indicate *mE*.)
- $vE^1 = V$ (Whether *v* is primary or composed of *nD*, *vS*, etc., when it occurs with *E*¹ it is in utterance final position, and will be marked *V*.)
- $vE^3 = V$ (Emeneau indicates in §54 and fn. 5 that this can be taken either as *V* or as utterance-final *N*. Since other *N* are not restricted to utterance final, and since other utterance-final *N* are preceded by /, / as in §19, whereas *V* and the present *vE*³ are not, it seems more convenient to consider this equivalent to *V* in distribution.)
- $vE^4-k = V$ (This occurs only with the argumentative and volun-tative members of *m*.)⁹

⁸ If we do not wish to regard the absolute case as a zero suffix, but prefer to say that when there is no suffix it is merely the noun stem by itself that occurs (in absolute meaning), we would have to replace this equation by $nc = n$, indicating that a noun stem without case ending occurs in the same environments as a noun stem with case ending.

⁹ There are restrictions on the concurrence of *E*^{3,4} and members of *m*. Some tense-modal suffixes occur with *E*³, others with *E*⁴. The indicative present-future occurs with either one.

- $vf = V$ (I.e. vf , vE^4 -k, vE^3 , vE^1 can each be substituted for any of the others.)
- $F = V^1$ (V^1 will indicate verbs followed by /,/ rather than by /./, /e/, or /?/. §61 suggests that there are also sequences of the form vmE^1 which are equivalent to V^1 , i.e. restricted to occur before /,/.)
- $vE^4 = N$ (E^4 without the -k; note that this equals N , not n ; i.e. it does not take case-endings.)
- $P-n = N$ (The sequence $P-n$ occurs in the series of N that precede a V .)
- $Pp = P$
- $XR = X$ (Where X may be either N , V , or V^1 .)
- $XX = X$ (Where X may be N , V^1 , or P , and the double writing indicates repetition of the particular stem, sometimes in a slightly variant form, with a repetitive or intensive meaning, §29.)
- $N^1N^2 = N$ (For only a few pairs of members of N , or for the morpheme giX which occurs only in N^2 ; the meaning is ' N^1 and N^2 ', but a single N can be substituted for the phrase, §27.)
- $N, N = N$ (Meaning ' N and N ', §27; or with relations set by their case-endings, §23.)
- $NN = N$; $NdN = N$ (The first is the attribute of the second; d is a suffix of N in first position. vE^4 perhaps does not occur in second position, §25.)
- $NNs = N$ (This rare construction may be considered exocentric; or else the s may be considered the head, with each member the attribute of its successor, thus making the construction parallel to the one above, §26.)
- quoted material = N (E.g. in §24.)
- $NV^1, NV^1 = NV^1$ (Repeated clauses can be replaced by one, §21.)
- $NV^1, NV = NV$ (The V clause can substitute for one preceded by V^1 , §21.)
- $V = NV$ (§20.)

Since it is possible to replace either side of each equation by the other side, we can now express all the sequences of morphemes discussed here in terms of only a few morpheme classes: P , N , V , and I . Each utterance of Kota, i.e. every stretch of speech between one occurrence of /./, /e/, /?/ (or silence) and another,¹⁰ may be described as consisting of one of the following sequences (or their equivalents): N , N or NV or I or P or N (§§18-20).

ZELLIG S. HARRIS

UNIVERSITY OF PENNSYLVANIA

¹⁰ Each ends in one of these three. If they were grouped into one class, marked, say, by z , we could say that each utterance is of the form N , Nz or NVz and so on. This is an added reason for distinguishing them from /,/ as was done above.

OUTLINE OF BURMESE GRAMMAR. By WILLIAM CORNYN. (Language Dissertation No. 38.) Pp. 34. Baltimore: Linguistic Society of America, 1944.

Cornyn's dissertation is an important contribution to linguistics. It is the first attempt to describe colloquial Burmese scientifically—even the best of the traditional scholars, such as Stewart, have not been able to get away from the approach through the native orthography, or to avoid treating colloquial usage as a sort of corruption of the literary language. Of the descriptive grammars prepared as a war measure under the auspices of the American Council of Learned Societies, it is one of the first to reach print.

The Outline was prepared from material furnished by Mr. Shwe Waing of Taw Wi, Lower Burma, who acted as tutor in Burmese, under Cornyn's direction, for the Army Specialized Training Program at Yale University. Other students of Burmese may find themselves not in complete agreement with Cornyn on some points: their informants may represent other dialect areas, where certain morphemes have a different phonemic shape, or they may normally use words or syntactic patterns different from some of those preferred by Shwe Waing. But in the same way, a Chinese linguist describing Boston speech would not altogether endorse another Chinese linguist's description of the speech of someone from Milwaukee. Shwe Waing is keenly aware of the difference between normal colloquial and artificial speech, and the Outline is based on what he used in normal colloquial situations—a test to which all evidence offered in confutation of Cornyn's conclusions must be subjected. That reinterpretations of certain portions of the Outline may be required by such evidence does not imply that Cornyn's analysis was wrong, but merely that additional evidence makes possible a more complete picture of how the language works.

One should also bear in mind that the Outline is not an ivory-tower production, but the by-product of intensive ASTP teaching. The very success which Cornyn had as a teacher might well have caused him to carry over into the Outline some pedagogically successful devices which not only are not necessary for a scientific analysis, but in fact prevent the best presentation of that analysis. This observation, however, does not alter the fundamental fact that the Outline is sound and that further analysis generally serves only to fill in the details.

The Outline is divided into six chapters: 1. Phonemes, 2. Survey of Grammar, 3. The Sentence, 4. Verb Expressions, 5. Noun Expressions, 6. Derivation. The work as a whole is subdivided into 178 consecutively numbered sections; citations here, as within the Outline, are made to these sections.

Chapter 1, like the rest of the Outline, is a straightforward account of the facts as Cornyn sees them. His discussion of the juncture phenomena (25-30) is particularly good. Although a reëxamination of the data has led him and me independently to suspect that there are five levels of juncture rather than four, the statement in the Outline will stand, until a new one can be formulated, as a great advance on anything previously said about Burmese juncture, and as one of the clearest statements on juncture-phenomena for any language.

Yet Chapter 1 is also the focal point for most of the adverse criticism of the Outline. This criticism does not imply that Cornyn's analysis lacks validity as far as it goes; rather, it means that the analysis does not go far enough, and is inadequately represented by the transcriptions.

The phonemes are listed as twenty-nine consonants, nine vowels, and four tones. The number of consonants and vowels can easily be reduced by a simple additional step in the analysis; the number of tones is possibly susceptible of a similar reduction. The aspirated stops, affricate, and spirant /kh, th, ph, ch, sh/ are almost certainly clusters of plain consonant plus /h/; the preaspirated lateral and nasals /hl, hm, hn, hŋ/ are most probably clusters of /h/ plus /l, m, n, ŋ/. Four of Cornyn's vowels, /ei, ai, au, ou/, suggest analysis as diphthongs /ey, ay, aw, ow/, since doubled vowels and other vowel clusters do not exist. The initial glottal stop /ʔ/ appears to be not a phoneme but a feature of vowel-onset, since there is no contrast between the presence and absence of /ʔ/ before vowels. In some dialects of Burmese, at least, it is possible to analyze /š/ as /hy/: *nepphyán* 'tomorrow' sometimes appears phonetically as [neppšán]. In view of the sandhi-assimilation before a following consonant (28), Tone IV, as in *weʔ*, 'pig' may actually not be a separate tone but Tone III plus a final stop. The last two observations are possibilities of analysis that deserve to be mentioned if only to be refuted; the reduction in the number of phonemically discrete vowels and consonants and the elimination of initial /ʔ/ as a phoneme seem to make for a more accurate as well as a more economical analysis.

As far as transcription is concerned, the Outline distinguishes between a voiceless interdental /θ/ and a voiced /ð/. Pedagogically, this distinction is desirable; in a descriptive analysis, however, it is unnecessary, since the two sounds are predictable allophones of a single phoneme. Furthermore, the transcription-practice seems to indicate some doubt as to whether Tone IV is a tone or not. In the discussion of the individual tones (4) this one is indicated as marked with a post-vocalic glottal stop /-ʔ/, the same symbol that initially stands for one of Cornyn's consonants. In the discussion of juncture and sandhi (28) it is stated that in close juncture 'the glottal closure [of Tone IV] is replaced by a plain unvoiced stop of the same position as the initial sound of the following syllable'. In the same section, among the illustrations of Tone IV in close juncture, we are given *θaummé* 'will drink' and *khawwéiwéigà* 'from afar'. It seems also a mistake not to indicate syllabic division in close juncture. In Burmese, as in Chinese and Siamese, the point of syllable-onset is significant; the existence of even one form *kú-nytdé* 'helps', where failure to mark syllabic division might lead to ambiguity (there are many others—every instance of a nasal-final verb followed by the auxiliary *-yà*) means that this point should be uniformly indicated.

It would also have seemed advisable for Cornyn to include in the chapter on phonemics a small section on the morphophonemic changes of tone substitution and loss of tone. Both are treated here and there: tone substitution under noun-expression attributes (125), numerals (134, 136), and derivation (154.1); loss of tone under interrogative sentences (45), numerals (132), and derivation (154.2). These statements could be grouped together, and to them could be

added the statement that in compounds certain noun-forms are replaced by morpheme-alternants with toneless final syllables, as *dá* 'knife', *dalwé* 'sword'; *zagá* 'word, speech', *zagabyán* 'interpreter'.

Chapter 2, Survey of Grammar, is a brief summary of the parts of speech (nouns and verbs) and of the bound forms (particles, proclitics, and enclitics), and a statement of the contents of subsequent chapters.

Chapter 3, The Sentence, begins with a discussion of the three main types of sentence—narrative, imperative, and equational—followed by a discussion of subordination, general particles, minor sentences, and parataxis. The only revision of the statements one could offer would be to classify the major sentence-types as two—nominal and verbal. Nominal sentences include equational sentences with two equated noun-expressions; they also include sentences with a single noun-expression, of the type *thú dí éimhmá néiddbê* 'It's a fact that he lives in this house'. Verbal sentences include narrative and imperative sentences: in the former the final particle is *-té*, *-mé*, or *-pí*; in the latter it is zero. Verbal sentences may be negativized by prefixing *ma-* to the head verb (or sometimes to one of the subordinate verbs) in a verb phrase, with replacement of the final particle under certain stated conditions; nominal sentences may be negativized only by adding in parataxis the negative statement *mahoupphú* 'it isn't so'.

Chapter 4, Verb Expressions, deals with subordinate verb expressions, noun expression attributes, secondary verbal particles, and auxiliaries. Only a few details of this very clear and economical presentation seem to need modification. There seems to be no difference between the secondary verbal particle *-yá*, denoting compulsion (103), and the auxiliary verb *yá* 'has the opportunity of' (120). Formally there is no difference: in a series of particles and auxiliaries there is no difference of position, but each is preceded and followed by the same morphemes as the other. Even on the basis of meaning—a tenuous basis at best—it is often impossible to tell which is which. Since we have *'a'èi mîdé* 'caught a cold', it seems better to class *mî* with the auxiliaries than with the particles. The particle *-séi* of first-person commands (106) is probably the same as the auxiliary *séi* 'sends, causes to do' (116).

Chapter 5, Noun Expressions, treats ordinary nouns (simple and compound), interrogative nouns, numerals, and classifiers. Chapter 6, Derivation, treats the processes of deriving noun expressions from verbal expressions by proclitic particles, enclitic particles, and doubling, and of deriving noun expressions from nouns by doubling. These chapters are sound, and in general thoroughly accurate. There are, however, a few questionable details in the section on enclitics (152–62). Is the nominalizing *-té* (154) really different from the final particle *-té* (37), or are the examples cited merely illustrations of the common practice of quoting without the quotative particle *-lòu*? It seems also a mistake to include alongside such truly derivational particles as *-tá*, *-hmdá*, *-tè*, *-mè*, *-sayá*, *-khín*, such bound forms as *-táin*, *-lòun*, *-phòu*, which may be attached to either verbs or nouns, as in *nèi-dáin* 'every day'. This last group could be classified separately as bound noun stems, a class including such forms as *-che'* 'argument',

-*cāun* 'reason', -*cāun* 'circumstance', -*chéin* 'time, occasion', and the like, any of which may be used to form nouns by compounding with *a-*, with nouns, or with verbs, as *éin pyánjéin támbi* 'It's time to go home'.

But in spite of these objections—and they are, after all, very few—the impression which the Outline makes is a most favorable one. It is a well-organized, efficient, workmanlike analysis of the facts of Burmese as Cornyn has recorded them from Shwe Waing's conversation. It provides a sound framework around which other linguists may build more detailed analyses, and it sets a standard of performance for other descriptive grammars that may be prepared under the Intensive Language Program.

RAVEN I. McDAVID JR.
DUKE UNIVERSITY